

HDD & DVD Player / Recorder

DVDR7310H

User Manual

Thank you for choosing Philips.

Need help fast?

Read your Quick Use/Start Guide and/or User Manual first for quick tips that make using your Philips product more enjoyable.

*If you have read your instructions and still need assistance, you may access our online help at **www.philips.com/support***



SHOWVIEW™ VIDEO *plus+*®

GUIDE *plus+*™
GEMSTAR

PHILIPS

Important notes for users in the U.K.

Mains plug

This apparatus is fitted with an approved 13 Amp plug. To change a fuse in this type of plug proceed as follows:

- 1 Remove fuse cover and fuse.
- 2 Fix new fuse which should be a BS1362 5 Amp, A.S.T.A. or BSI approved type.
- 3 Refit the fuse cover.

If the fitted plug is not suitable for your socket outlets, it should be cut off and an appropriate plug fitted in its place.

If the mains plug contains a fuse, this should have a value of 5 Amp. If a plug without a fuse is used, the fuse at the distribution board should not be greater than 5 Amp.

Note: The severed plug must be disposed of to avoid a possible shock hazard should it be inserted into a 13 Amp socket elsewhere.

How to connect a plug

The wires in the mains lead are coloured with the following code: blue = neutral (N), brown = live (L).

- As these colours may not correspond with the colour markings identifying the terminals in your plug, proceed as follows:
 - Connect the blue wire to the terminal marked N or coloured black.
 - Connect the brown wire to the terminal marked L or coloured red.
 - Do not connect either wire to the earth terminal in the plug, marked E (or \perp) or coloured green (or green and yellow).

Before replacing the plug cover, make certain that the cord grip is clamped over the sheath of the lead - not simply over the two wires.

Copyright in the U.K.

Recording and playback of material may require consent. See Copyright Act 1956 and The Performer's Protection Acts 1958 to 1972.

Italia

DICHIARAZIONE DI CONFORMITA'

Si dichiara che l'apparecchio DVDR7310H, Philips risponde alle prescrizioni dell'art. 2 comma 1 del D.M. 28 Agosto 1995 n. 548.

Fatto a Eindhoven

Philips Consumer Electronics
Philips, Glaslaan 2
5616 JB Eindhoven, The Netherlands

Norge

Typeskilt finnes på apparatens underside.

Observer: Nettbryteren er sekundert innkoplet. Den innebygde nettdelen er derfor ikke frakoplet nettet så lenge apparatet er tilsluttet nettkontakten.

For å redusere faren for brann eller elektrisk støt, skal apparatet ikke utsettes for regn eller fuktighet.

For Customer Use:

Read carefully the information located at the bottom or rear of your DVD Recorder and enter below the Serial No. Retain this information for future reference.

Model No. DVD RECORDER DVDR7310H
Serial No. _____

DK

Advarsel: Usynlig laserstråling ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

Bemærk: Netafbryderen er sekundært indkoblet og afbryder ikke strømmen fra nettet. Den indbyggede netdel er derfor tilsluttet til lysnettet så længe netstikket sidder i stikkontakten.

S

Klass I laserapparat

Varning! Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass I.

Observera! Stömbrytaren är sekundärt kopplad och bryter inte strömmen från nätet. Den inbyggda nåtdelen är därför ansluten till elnätet så länge stickproppen sitter i vägguttaget.

SF

Luokan I laserlaitte

Varoitus! Laitteen käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan I ylittävälle näkymättömälle lasersäteilylle.

Oikeus muutoksiin varataan. Laite ei saa olla alttiina tippu- ja roiskevedelle.

Huom. Toiminnanvalitsin on kytketty toisiopuolelle, eikä se kytke laitetta irti sähköverkosta. Sisäänrakennettu verkko-osa on kytketty sähköverkkoon aina silloin, kun pistoke on pistorasiassa.

CAUTION

VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM

ADVARSEL

SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING UDGÅ UDSÆTTELSE FOR STRÅLING

VARNING

SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD BETRakta EJ STRÅLEN **VARO!**

AVATTAESSA OLET ALTTIINA NÄKYVÄLLE JA NÄKYMÄTTÖMÄLLE LASER SÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN

VORSICHT

SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN

ATTENTION

RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE EXPOSITION DANGEREUSE AU FAISCEAU

Disposal of your old product



Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.

When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC. Please inform yourself about the local separate collection system for electrical and electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

LASER

Type	Semiconductor laser InGaAlP (DVD) AlGaAs (CD)
Wave length	658 nm (DVD) 790 nm (CD)
Output Power	30 mW (DVD+RW write) 1.0 mW (DVD read) 1.0 mW (CD read)
Beam divergence	84 degrees (DVD) 61 degrees (CD)

'CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE 'STANDARD DEFINITION' OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p AND 625p DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER.'



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HDMI

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This product incorporates copyright protection technology that is protected by US patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

U.S. Patent Numbers 4,631,603; 4,819,098; 4,907,093; 5,315,448 and 6,516,132.



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Due to the inconsistency of disc formats provided by various disc manufacturers, your DVD system/ player/recorder may require a playability enhancement or upgrade. As DVD technology advances, these enhancement will become common and will be easy to complete. Go to www.philips.com/support for software upgrade.

En raison de la diversité des formats utilisés par les fabricants, votre système DVD peut nécessiter l'ajout de périphériques ou une mise à niveau logicielle. Au fur et à mesure des progrès de la technologie DVD, ces périphériques se font de plus en plus courants et aisés à intégrer. Pour télécharger la mise à niveau logicielle, visitez le site www.philips.com/support.

Debido a los diferentes formatos de discos disponibles en el mercado, es posible que deba realizar mejoras o actualizaciones en el sistema de DVD relativas a las funciones de reproducción. Conforme la tecnología DVD avanza, estas mejoras estarán al alcance de todo tipo de usuarios y se podrán llevar a cabo fácilmente. Visite la página "www.philips.com/support" para buscar información sobre actualizaciones de software.

Da das Disk-Format je nach Hersteller verschieden ist, ist für Ihr DVD-System möglicherweise die Erweiterung der Spielbarkeit oder eine Aktualisierung erforderlich. Da die DVD-Technologie sich ständig weiterentwickelt, werden sich diese Erweiterungen durchsetzen und einfach auszuführen sein. Gehen Sie zu für Ihre Software-Aktualisierung zu „www.philips.com/support“.

Doordat fabrikanten verschillende schijfindelingen aanbieden, moet uw dvd-systeem mogelijk worden geüpgradet of uitgebreid. Naarmate de dvd-technologie zich verder ontwikkelt, zullen deze uitbreidingen normaal worden en zult u ze gemakkelijk kunnen uitvoeren. Ga naar "www.philips.com/support" om uw software te upgraden.

A causa della differenza di formato tra i dischi forniti dai vari produttori, il sistema DVD potrebbe richiedere un potenziamento o aggiornamento della riproducibilità. Col progredire della tecnologia DVD, questi potenziamenti diverranno comuni e facili da implementare. Visitare "www.philips.com/support" per scaricare gli aggiornamenti del software.

This product complies with the radio interference requirements of the European Community.



This product complies with the requirements of the following directives and guidelines: 73/23/EEC + 89/336/EEC + 93/68/EEC

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Care and Safety Information

CAUTION!

High voltage! Do not open.
You run the risk of getting an electric shock.

The machine does not contain any user-serviceable parts. Please leave all maintenance work to qualified personnel.

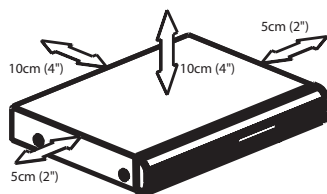
Setup precautions

Finding a suitable location

- Place the set on a flat, hard and stable surface. Do not place the set on a carpet.
- Do not position the set on top of other equipment that might heat it up (e.g., receiver or amplifier).
- Do not put anything under the set (e.g., CDs, magazines).
- Install this unit near the AC outlet and where the AC power plug can be reached easily.

Space for ventilation

- Place the apparatus in a location with adequate ventilation to prevent internal heat build up. Allow at least 10 cm (4") clearance from the rear and the top of the set and 5cm (2") from the left and right to prevent overheating.



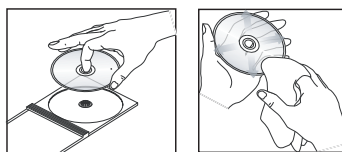
Avoid high temperature, moisture, water and dust

- Apparatus must not be exposed to dripping or splashing.
- Do not place any object or items that can damage the apparatus (e.g., liquid filled objects, lighted candles).

Cleaning discs

Some problems occur (frozen picture, sound disruptions, picture distortions) if the disc is dirty. To avoid these problems, discs should be cleaned on a regular basis.

To clean a disc, use a micro fibre cleaning cloth and wipe the disc from the center to the edge in a straight line.



CAUTION!

Do not use solvents such as benzene, thinner, commercially available cleaners, or anti-static sprays intended for discs.

Hard Disk Drive (HDD) handling care

To avoid damage to the hard disk and losing important data:

- Do not move the recorder or subject it to vibration whilst in operation.
- Do not remove the AC power plug from the mains socket without switching the recorder to standby mode.

It is recommended to archive important recording to a recordable DVD as backup.

Product Information

Introduction

This recorder has a built-in Hard Disk Drive (HDD). You can record up to 400 hours of video (in SEP record mode) on the internal 250GB (GigaByte) hard disk. With both recordable DVD and high capacity HDD in the same recorder, you have the flexibility to keep recordings on the HDD or copy to a recordable DVD for safekeeping or later viewing.

In addition, it has a built-in GUIDE Plus+ system. The GUIDE Plus+ system offers a free programme listings guide for all the TV programmes available in your area. You can also use the GUIDE Plus+ system to program your recorder to record your favourite TV programmes.

Furthermore, you can take advantage of features like 'FlexTime', 'Instant Replay', or 'Pause Live TV'. See the respective chapter in the user manual for more information.

Before you can start using this recorder, you must complete the basic connection and set-up in four easy steps.

- Step 1: Basic recorder connections (pages 15~18)
- Step 2: Optional connections for other devices (pages 19~23)
- Step 3: Basic installation and set-up (pages 24~25)
- Step 4: GUIDE Plus+ set-up (pages 26~27)

Please take time to read this user manual before using your recorder. It contains important information and notes regarding operation of the DVD recorder.

Helpful Hints:

- If you have questions or if problems occur during operation, see the chapter 'Troubleshooting'.
- If you need further assistance, call the customer support service for your country. The corresponding telephone numbers and e-mail addresses are given in the guarantee booklet.
- Refer to the type plate at the rear or bottom of the product for identification and supply ratings.

Accessories supplied

- Quick Start Guide
- RF coaxial cable
- Scart cable
- G-LINK transmitter
- Remote control and batteries
- Power cable

Region codes

DVD films are usually not released at the same time in all regions of the world, thus all DVD players/recorders are keyed to a specific region code.

This device will only play **Region 2** DVDs or DVDs manufactured to be played in all regions '**ALL**'. DVDs from other regions cannot be played on this recorder.



Product Information (continued)

Special features



Philips provides the best possible connection between your recorder and other home cinema equipment. The recorder is controlled by external devices (for example, receivers and TVs) via Cinema Link and is automatically set to the right system settings.

FOLLOW...TV

With this function you can align the sequence of the channels on your TV with those on your recorder. Make sure you have connected the TV to the EXT1 TO TV-I/O socket of this recorder.

Automatic SATELLITE Recording

This function enables you to record a programme from your Satellite Receiver or any other devices. Make sure that the device is connected to the EXT2- AUX I/O socket of this recorder, and the timer setting has been done on the connected device.

Direct Record

This function allows you to instantly record the programme you see on the TV without tuning this recorder to the same programme.

Time Shift Buffer

As soon as you turn on this recorder, the programme showing on the TV will be stored into the 'Time Shift Buffer'. It acts as a temporary HDD storage of your recordings. The contents will be automatically deleted after 6 (six) hours or when you turn off this recorder. To store the contents on the hard disk permanently, you have to mark the section in the 'Time Shift Buffer' for recording to prevent them from being deleted.

FlexTime

You can watch or recall a TV programme while it is still being recorded. You do not have to wait until the end of the recording before starting playback. You can also watch a different programme from the hard disk while it is recording something else.

Instant Replay

You can repeat a scene of a live TV programme by pressing JUMP BACK button on the remote control, as often as you like. If you wish to return to the live TV programme, just press TUNER.

Pause Live TV

A live TV programme is now under your control. You can pause the programme by pressing PAUSE button and resume playback at the scene it was interrupted by pressing PLAY button. If you want to return to the live TV programme, just press TUNER.



i.LINK, is also known as 'FireWire' and 'IEEE 1394'. This connection is used for the transfer of high bandwidth digital signals as used by digital video (DV) devices. It carries all audio and video signals via a single cable.

SHOWVIEW[™] VIDEOplus[™]

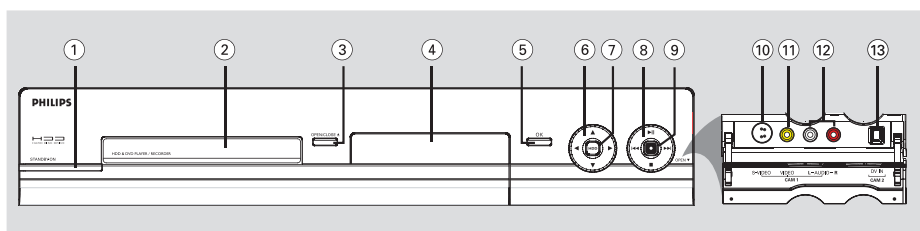
This is a simple programming system for recorders. To use it, enter the programming number associated with your television programme. You can find this number in your favourite listings magazine.



The GUIDE Plus+ system lists your TV channel programming information. You can use it to schedule recordings, glance at upcoming programme content, or change channels at your external receiver/cable box using this recorder's remote control.

Main Unit

English



① **STANDBY-ON**

- Turns the recorder on or to standby mode.

② **Disc tray**

③ **OPEN CLOSE**

- Opens or closes the disc tray.

④ **Display panel**

- Shows information about the current status of the recorder.

⑤ **OK**

- Confirms an entry or selection.

⑥ : Cursor buttons for moving to the left/right, or select the previous/next scene.

- ▲▼ : Cursor buttons for moving up/down or select previous/next title in the temporary HDD storage during playback.

⑦ **HDD**

- Displays the content browser menu.
- Lights up while access the HDD browser menu.

⑧ **▶▶**

- Starts playback of the selected title/track.
- Pauses the playback or recording.

/

- Skips to the previous or next chapter/track. Hold down the button to make a reverse/forward search.



- Stops playback/recording.

⑨

- Starts recording the current TV programme or the current video input source.
- Marks the title in the time shift buffer for recording onto the HDD.
- Lights up while recording to the HDD or recordable DVD is in progress.

Sockets behind the flap

Flip down the door as indicated by the **OPEN ▼** label at the right hand corner.

⑩ **S-VIDEO**

- S-video input for SVHS/Hi8 camcorders or SVHS/Hi8 video recorders.

⑪ **VIDEO**

- Video input for camcorders or video recorders.

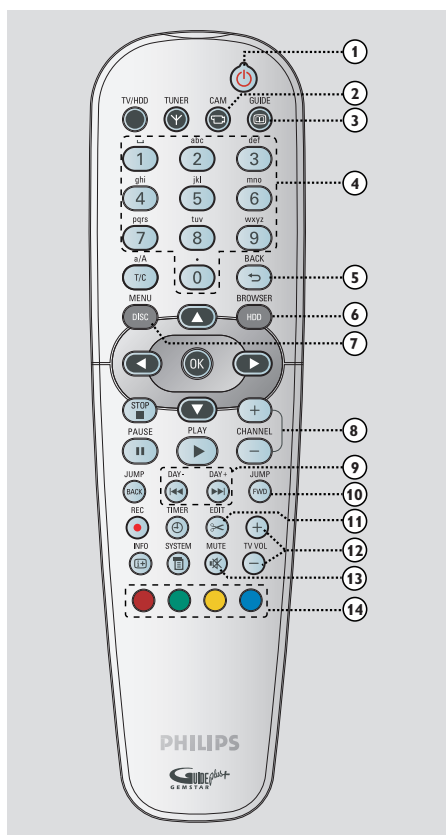
⑫ **L/R AUDIO**

- Audio input for camcorders or video recorders.

⑬ **DV IN**

- Inputs for digital camcorders using this connector.

Remote Control



①

- Turns the recorder on or to standby mode.

② CAM

- Access the camcorder mode (CAM2) for DV camcorder recording.
- In camcorder mode, press **CHANNEL + / -** to select other external input source (CAM1, EXT1 or EXT2).

③ GUIDE

- Enters/exits the GUIDE Plus+ system.

④ Alphanumeric keypad

- Enters numbers or letters in appropriate entry fields.
- Selects a chapter/track/title number to play.
- Selects the recorder's preset TV tuner channel.

⑤ BACK

- Returns to the previous menu on a video CD (VCD) or some DVDs.

⑥ HDD-BROWSER

- Enters/exits the content browser menu.

⑦ DISC-MENU

- Switches to disc mode or displays the disc content menu.

⑧ CHANNEL + -

- While in tuner mode, selects the next or previous TV channel or the external input source (EXT1, EXT2, CAM1).
- Skips to the next page up or down in the GUIDE Plus+ system.

⑨ ◀◀ / ▶▶ (Day-/ Day+)

- Skips to the previous or next day in the GUIDE Plus+ system.
- Skips to the previous or next title/ chapter/track.
- Hold down this button for fast reverse or fast forward search.

⑩ JUMP-FWD / JUMP-BACK

- Jumps forward/backward by a specified length of time in tuner mode.

⑪ EDIT

- Enters/exits the editing menu.

⑫ TV VOL + -

- Adjusts the volume of the TV (for Philips TV with RC5 code only).

⑬ MUTE

- Mutes or restores the volume.

⑭ Colour coded buttons

- These buttons are used to select the coloured options available in some menu displays on the TV screen.

Remote Control (continued)

⑮ TUNER

- Switches to the recorder's tuner mode (TV channel).

⑯ TV/HDD

(only applicable when using the EXT1 TO TV-I/O scart socket to connect your TV)

- Switches to the device that is connected to the EXT2 AUX-I/O scart socket of this recorder.
- Toggles between the recorder and TV mode if there is no video input signal from EXT2 AUX-I/O scart socket.

⑰ T/C

- Toggles between 'T'(title) and 'C'(chapter) selection during disc playback, then use the ◀◀ / ▶▶ keys to select a title/chapter number.

a/A

- Toggles between upper and lower case characters while using the alphanumeric keypad.
- Selects multiple photos in the thumbnail menu.

⑱ OK

- Confirms an entry or selection.

- ⑲ ◀▶ : Cursor buttons for moving to the left/right, or select the previous/next scene.

▲▼ : Cursor buttons for moving up/down or select previous/next title in the temporary HDD storage during playback.

⑳ STOP ■

- Stops playback/recording.
- Hold down this button to open or close the disc tray.

㉑ PAUSE II

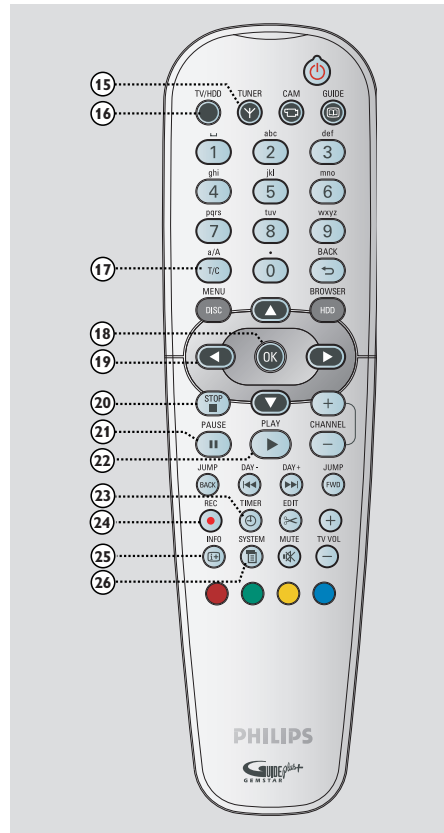
- Pauses the playback or recording.
- Press repeatedly to advance a paused picture one frame at a time.

㉒ PLAY ▶

- Starts playback of the selected title/track.

㉓ TIMER

- Enters/exits the timer recording menu.



㉔ REC ●

- Starts recording the current TV programme or the current video input source.
- Marks the title in the time shift buffer for recording onto the HDD.

㉕ INFO i+

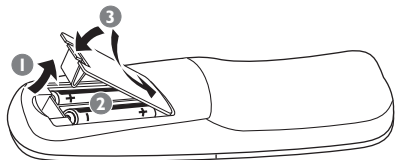
- Displays the Time Shift video bar while in tuner mode. It shows the timing of the TV programmes stored in the temporary HDD storage.
- Access the programme details in the GUIDE Plus+ system.

㉖ SYSTEM

- Enters/exits the system setup menu.

Remote Control (continued)

Using the remote control



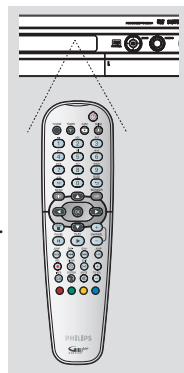
- 1 Open the battery compartment.
- 2 Insert two batteries type R06 or AA, following the indications (+ -) inside the compartment.
- 3 Close the cover.

CAUTION!

- Remove batteries if they are exhausted or if the remote control is not to be used for a long time.
- Do not mix batteries (old and new or carbon and alkaline, etc.).
- Batteries contain chemical substances, so they should be disposed of properly.

Using the remote control to operate the system

- 1 Aim the remote control directly at the remote sensor (iR) on the front panel.
- 2 Select the source you wish to control by pressing **TUNER** or **DISC MENU** button.
- 3 Select the desired function (for example **◀◀ / ▶▶**).

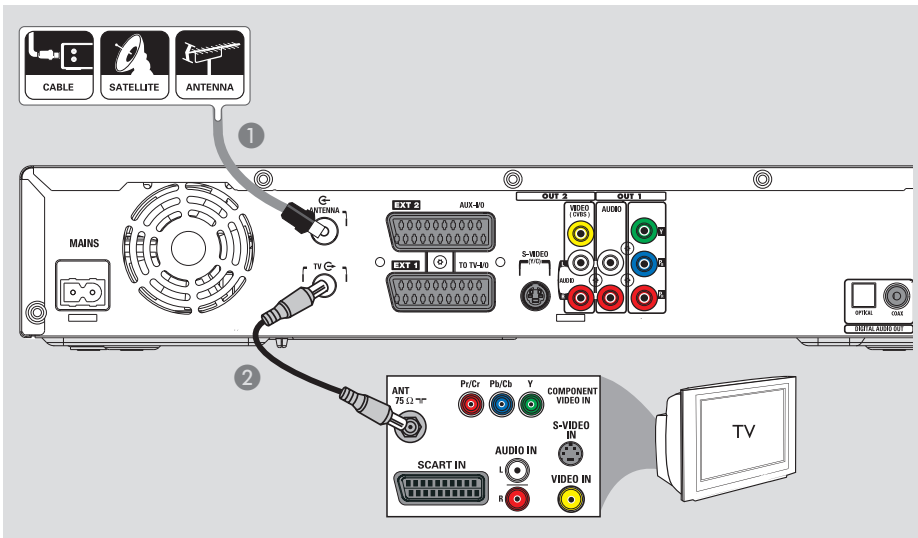


Using the alphanumeric keypad to enter the characters



- Press a number button repeatedly until the required character or the number appears.
- To enter language-dependent characters, press **◀◀ / ▶▶** on the corresponding character, e.g.: 'ä' press button {2} for 'a' and then press **▶▶** until 'ä' appears.
- To enter special symbols, press button {1} repeatedly.
- To select upper/lower case (capital/small) letters, press **a/A**.
- To enter a space, press button {I}.

Step 1: Basic Recorder Connections



Connecting the antenna cables

These connections enable you to watch and record TV programmes using this recorder. If the antenna signal is connected via a Cable Box or Satellite Receiver, ensure that these devices are turned on in order to watch or record the cable programmes.

- **If you want to connect to a VCR and/or a separate Cable Box/ Satellite Receiver**, see page 19~21 for other possible connections.

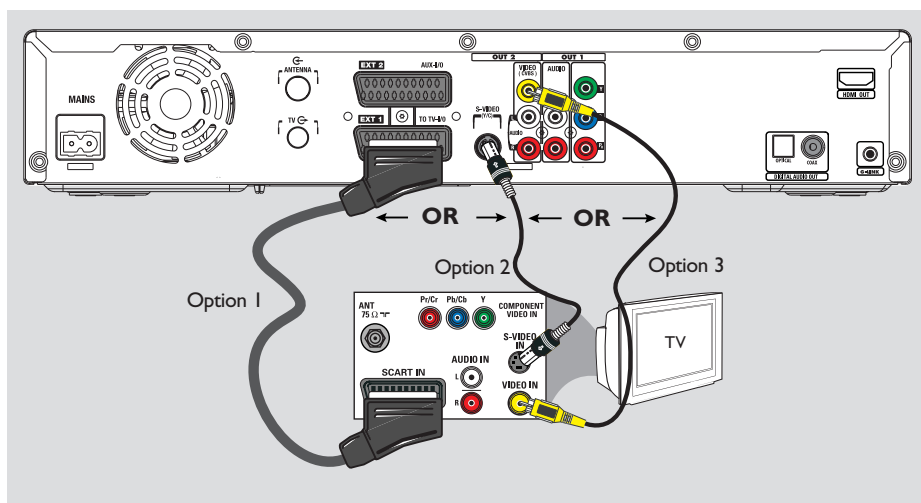
- 1 Connect the existing Antenna/ Satellite/ Cable TV signal (or from the Cable Box/ Satellite Receiver, labelled as RF OUT or TO TV) to the **ANTENNA** socket on the recorder.
- 2 Use the supplied RF coaxial cable to connect the **TV** socket on the recorder to the antenna input socket (or labelled as VHF/UHF RF IN) on your TV.

Helpful Hint:

– Depending on how you have currently connected your TV channel (directly from an off-air antenna or cable box or VCR), you'll have to disconnect some of the cables before you make the antenna connection.

TIPS: Before making or changing any connections, make sure that all the devices are disconnected from the power outlet.

Step 1: Basic Recorder Connections (continued)



Connecting the video cable

This connection enables you to view the playback from this recorder. You only need to choose **one** of the options below to make your video connection.

- For a standard TV, follow option 1, 2 or 3.
- For a progressive scan TV, follow option 4.
- For a HDMI TV, follow option 5.

Option 1: Using the Scart socket

- Use the scart cable to connect the **EXT1 TO TV-I/O** socket on the recorder to the corresponding SCART input socket on the TV.
→ If your TV has the Cinema Link feature or a similar feature, ensure that the scart cable is connected to the scart socket that supports CINEMALINK on your TV. All the available TV channels will automatically be downloaded to this recorder.

Helpful Hints:

- If your TV displays a selection for the SCART socket, select 'VCR' as the source for the SCART socket.
- The EXT2 AUX-I/O socket is intended only for additional devices.

Option 2: Using the S-Video socket

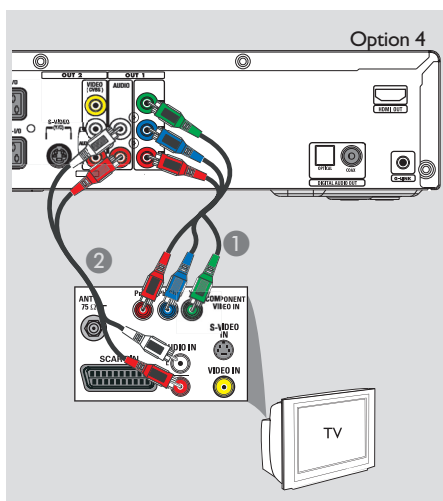
- Use an S-video cable (not supplied) to connect the **S-VIDEO (Y/C)** socket on the recorder to the S-Video input socket (or labelled as Y/C or S-VHS) on the TV.
→ Audio connection is required in order to hear the sound, see page 18.

Option 3: Using the Video (CVBS) socket

- Use a composite video cable (yellow - not supplied) to connect the **VIDEO (CVBS)** socket on the recorder to the video input socket (or labelled as A/V In, Video In, Composite or Baseband) on the TV.
→ Audio connection is required in order to hear the sound, see page 18.

TIPS: Before making or changing any connections, make sure that all the devices are disconnected from the power outlet.

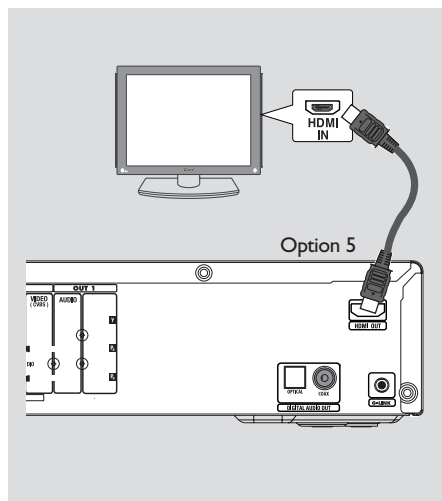
Step 1: Basic Recorder Connections (continued)



Option 4: Connecting to a Progressive Scan TV

The progressive scan video quality is only available when using Y Pb Pr connection and a progressive scan TV is required. It provides superior picture quality when watching DVD movies.

- 1 Use the component video cables (red/blue/green - not supplied) to connect the **OUT1-Y PB PR** sockets on the recorder to the corresponding component video input sockets (or labelled as Y Pb/Cb Pr/Cr or YUV) on the TV.
- 2 Use an audio cable (red/white - not supplied) to connect the **OUT1-AUDIO L/R** sockets on the recorder to the audio input socket (or labelled as AV IN or AUDIO IN) on the TV.
- 3 Once you have completed the necessary connections and the recorder basic installation/set-up, turn on the progressive scan feature, see page 83.



Option 5: Connecting to a HDMI-compatible TV

HDMI (High Definition Multimedia Interface) is a digital interface that allows pure digital video transmission without the loss of image quality.

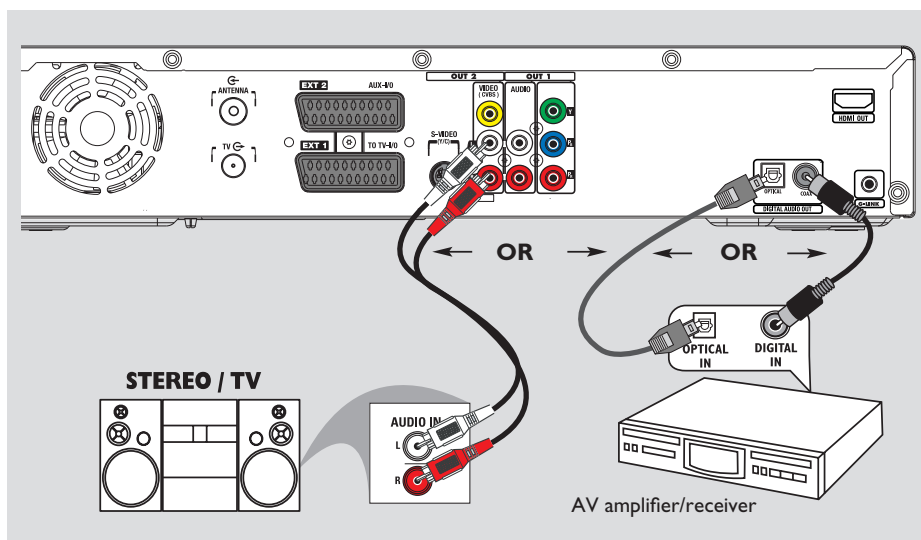
- 1 Use an HDMI cable (not supplied) to connect the **HDMI OUT** on this recorder to the **HDMI IN** on a HDMI-compatible device (e.g. HDMI TV, HDCP compliant DVI TV).
- 2 Once you have completed the necessary connections, installation and set-up, see pages 80~81 for optimum HDMI setting.

Helpful Hints:

- Digital devices from different manufacturers may have different output standards which may result in unreliable signal transfers.
- The HDMI connector is only compatible with HDMI compliant devices and DVI-TV.

TIPS: Before making or changing any connections, make sure that all the devices are disconnected from the power outlet.

Step 1: Basic Recorder Connections (continued)



Connecting the audio cables

This connection enables you to listen to the playback from this recorder. However, this connection is not required if this recorder is connected to the TV using the Scart or HDMI connectors.

Option 1: Using the analogue audio sockets

You can connect the recorder to a two channel stereo system (mini system, TV) or receiver in order to enjoy the stereo sound system.

- Use an audio cable (red/white - not supplied) to connect the **OUT2-AUDIO L/R** sockets to the audio input sockets of the connected device.

Helpful Hint:

– If you have connected this recorder to your TV using the **OUT1-Y Pr Pb** sockets, then connect the audio cables to the **OUT1-AUDIO L/R** sockets as described in page 17.

Option 2: Using the digital audio socket (Optical or Coaxial)

You can connect the recorder to an AV amplifier/receiver in order to enjoy multichannel surround sound.

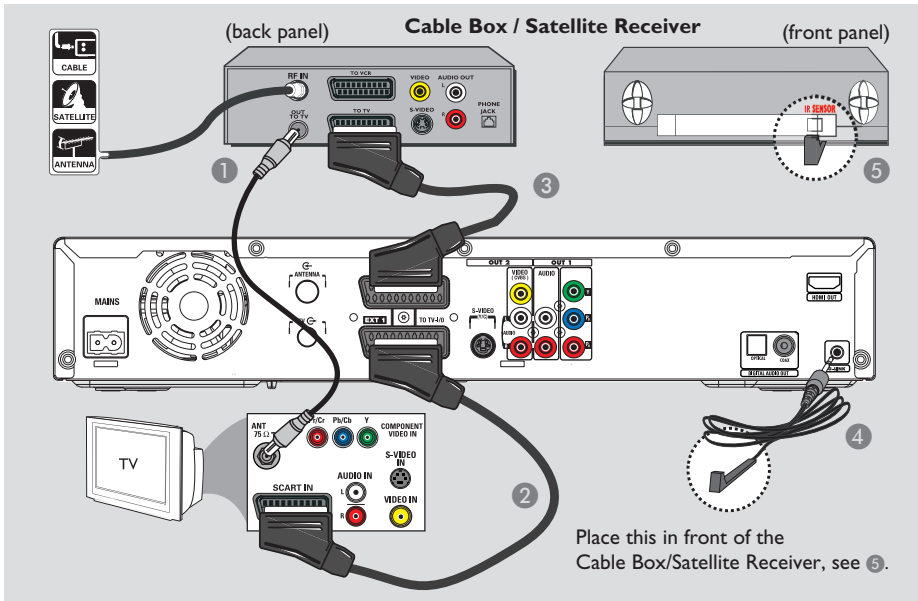
- Use a coaxial cable (not supplied) to connect the **COAX OUT** socket to the digital coaxial input socket (or labelled as **COAXIAL IN** or **DIGITAL IN**) of the connected device.
 - an A/V receiver or amplifier with a digital multi-channel sound decoder.
 - a receiver with two-channel digital stereo (PCM).

OR

- Use an optical fibre-optic cable (not supplied) to connect the **OPTICAL OUT** socket to the optical input socket of the connected device.
 - ➔ Make sure that both plugs are fully inserted (until a click is heard).

TIPS: For option 2 connection, you have to set the appropriate Digital Audio Output setting, see page 80. Otherwise, no sound or interference may occur.

Step 2: Optional Connections



English

Connecting to a Cable Box or Satellite Receiver

Option 1

If your Cable Box/Satellite Receiver has only an antenna output socket (RF OUT or TO TV), refer to “Connecting the antenna cables” on page 15 for the complete connection to your TV.

Option 2 (as shown on the above illustration)

If your Cable Box/Satellite Receiver has a Scart output socket

- 1 Keep the existing antenna connection from the Cable Box/Satellite Receiver to your TV.
- 2 Use the scart cable to connect the **EXT1 TO TV-I/O** socket on the recorder to the corresponding SCART input socket on the TV.

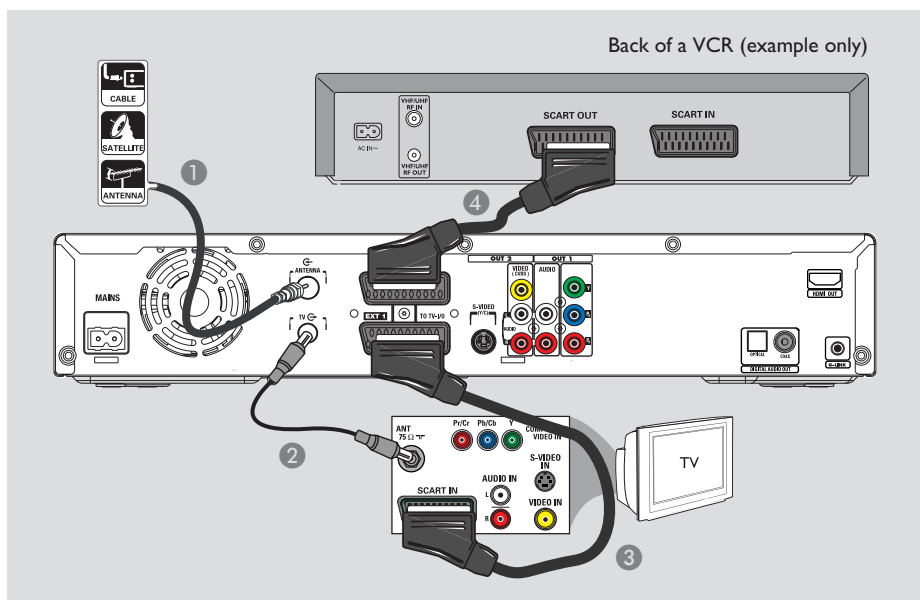
- 3 Use another scart cable to connect the **EXT2 AUX-I/O** socket on the recorder to the Scart output socket (or labelled as TV OUT or TO TV) on the Cable Box/ Satellite Receiver.
- 4 Connect the supplied G-LINK cable to the **G-LINK** socket on the recorder.
- 5 Place the other end of the G-LINK transmitter in front of the Cable Box/ Satellite Receiver near to the IR sensor (remote sensor) so that its infrared detector can receive a clear signal.
→ This will enable the recorder to receive data from the GUIDE Plus+ system and control the tuner of the external receiver.

Helpful Hint:

– If your TV is connected to the recorder via the **COMPONENT VIDEO (Y Pb Pr)** sockets, then connect the external cable box/satellite receiver to the **EXT1 TO TV-I/O** socket.

TIPS: Refer to the respective connected device’s user manual for other possible connections.

Step 2: Optional Connections (continued)



Connecting to a VCR or other similar device

This connection enables you to record from video tape to HDD and allows the VCR to be used for playback on the TV if the recorder is turned off.

IMPORTANT!

Your new recorder can replace the VCR for all your recording needs. Just unplug all the connections to your VCR.

- 1 Connect the existing Antenna/Satellite/Cable TV signal (or from the Cable Box/Satellite Receiver, labelled as RF OUT or TO TV) to the **ANTENNA** socket on the recorder.

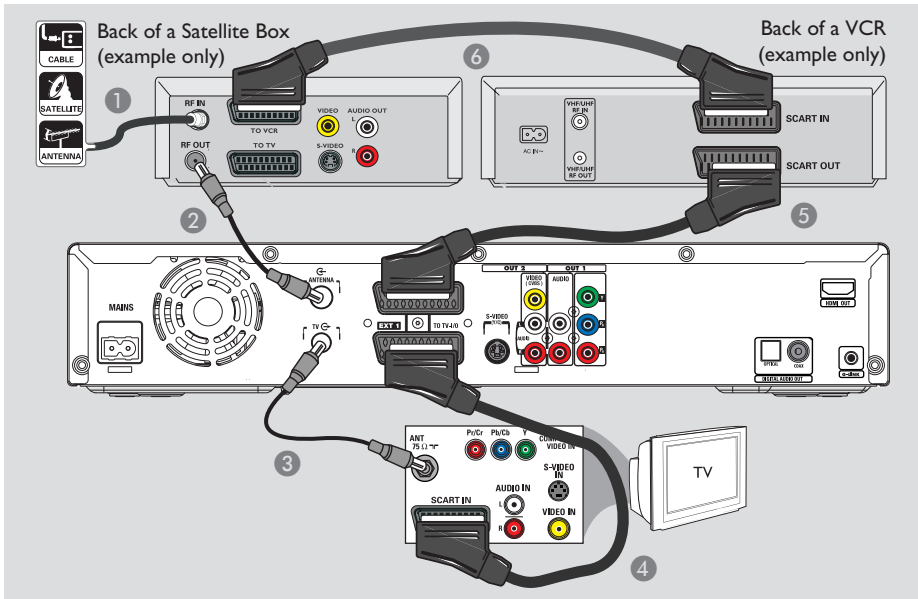
- 2 Use the supplied RF coaxial cable to connect the **TV** socket on the recorder to the antenna input socket (or labelled as VHF/UHF RF IN) on your TV.
- 3 Use the SCART cable to connect the **EXT1 TO TV-I/O** socket on the recorder to the corresponding SCART input socket on the TV.
- 4 Use another SCART cable to connect the **EXT2 AUX-I/O** socket on the recorder to the SCART output socket (or labelled as TV OUT or TO TV) on the VCR.

Helpful Hints:

- Most commercial video cassettes and DVDs are copy-protected and therefore cannot be recorded.
- Connect the recorder directly to the TV. If there is a VCR or an additional device in between, the picture quality may be poor because of the copy protection system built into this recorder.

TIPS: Refer to the respective connected device's user manual for other possible connections.

Step 2: Optional Connections (continued)



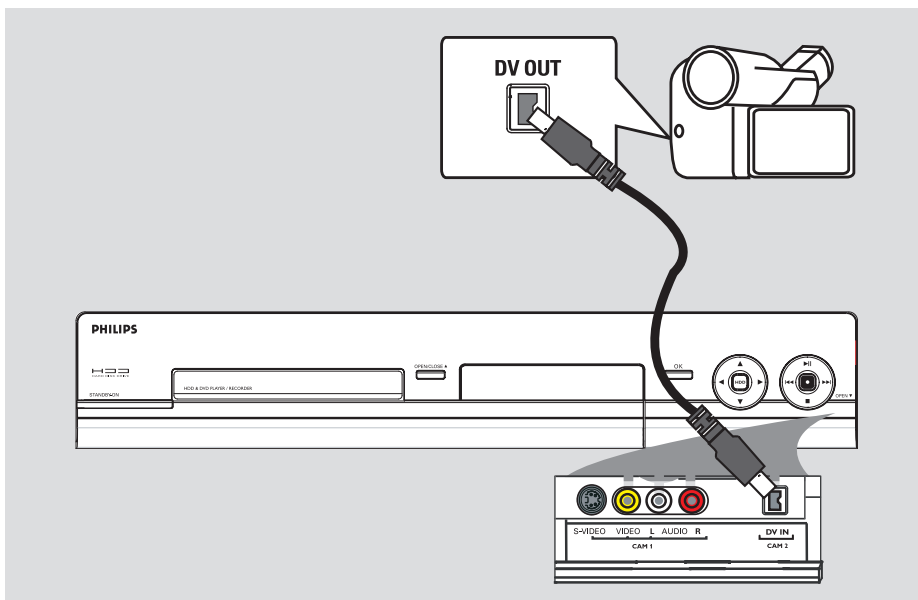
English

Connecting to a VCR and Cable Box/Satellite Receiver

- 1 Keep the existing antenna connection to the Cable Box/Satellite Receiver.
- 2 Use the supplied RF coaxial cable to connect the antenna output (RF OUT) socket on the Cable Box/Satellite Receiver to the **ANTENNA** socket on the recorder.
- 3 Use another RF coaxial cable to connect the **TV** socket on the recorder to the antenna input socket on the TV.
- 4 Use the scart cable to connect the **EXT1 TO TV-I/O** socket on the recorder to the corresponding SCART input socket on the TV.
- 5 Use another scart cable to connect the **EXT2 AUX-I/O** socket on the recorder to the Scart output socket (or labelled as TV OUT or TO TV) on the VCR.
- 6 Use another scart cable to connect the Scart input socket (or labelled as TV IN or TO DECODER) on the VCR to the Scart output socket (or labelled as TV OUT or TO VCR) on the Cable Box/Satellite Receiver.

TIPS: Refer to the respective connected device's user manual for other possible connections.

Step 2: Optional Connections (continued)



Connecting to a camcorder

You can use the front sockets to copy camcorder recordings. These sockets are located behind the flap on the right hand side which provides convenient connections for a camcorder.

Option 1: Using the DV IN socket

Use this connection if you have a Digital Video or Digital 8 camcorder. The DV socket conforms to the i.LINK standard. It provides the best picture quality.

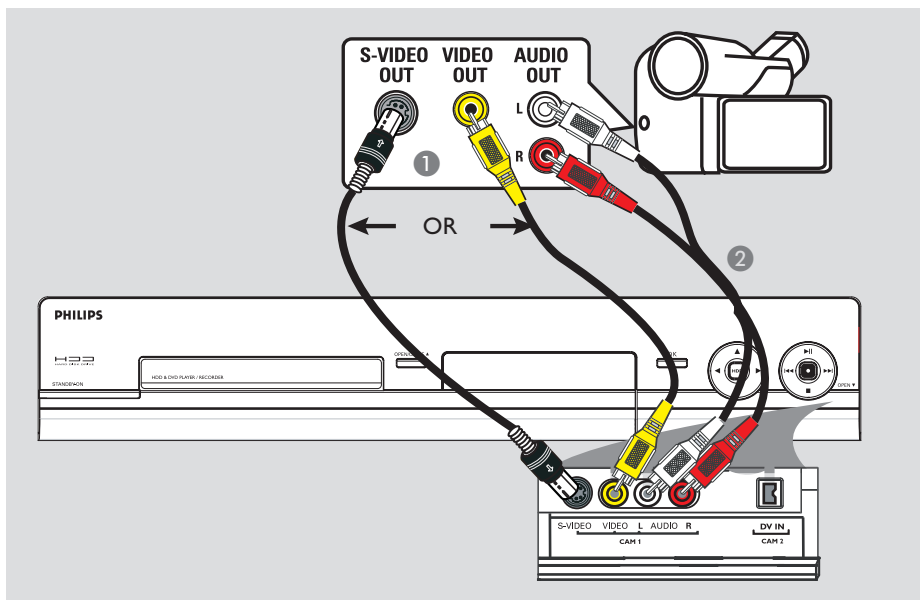
- Use an i.LINK 4-pin cable (not supplied) to connect the **DV IN** socket on the recorder to the appropriate DV OUT socket on the camcorder.
 - ➔ Press **CAM** on the remote control to select 'CAM2' when using this input source.

Helpful Hint:

– It is not possible to record from this recorder to your camcorder via the DV IN socket on your recorder.

TIPS: Refer to the respective connected device's user manual for other possible connections.

Step 2: Optional Connections (continued)



Option 2: Using the S-VIDEO In or VIDEO In socket

Use the S-VIDEO connection if you have a Hi8 or S-VHS(C) camcorder. It provides very good picture quality.

Alternatively, you can use VIDEO connection if your camcorder has only a single video output (Composite Video, CVBS). It provides good picture quality.

- 1 Connect the **S-VIDEO** or **VIDEO** socket at the front panel of the recorder to the corresponding S-VHS or Video output socket on the camcorder.
→ Press **CAM** on the remote control, then press **CHANNEL + / -** repeatedly to select 'CAM1' when using this input source.

- 2 Use an audio cable (red/white - not supplied) to connect the **AUDIO L/R** sockets at the front panel of the recorder to the audio output socket on the camcorder.

Helpful Hint:

– If you connect your camcorder to the scart socket at the rear of this recorder, select { EXT1 } or { EXT2 } as the input source.


TIPS: Refer to the respective connected device's user manual for other possible connections.

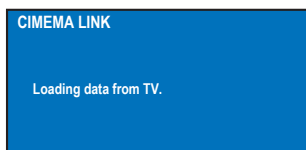
Step 3: Installation and Set-up

The basic installation menu will appear the very first time you turn on this recorder. These settings will help you set up the basic recorder features easily, including TV programme installation, language settings and the GUIDE Plus+ system.

IMPORTANT!

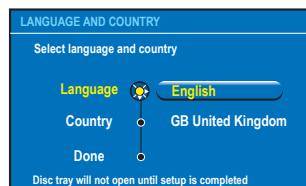
Complete the basic installation settings before inserting a disc for playback or recording. The disc tray will not open until the basic installation is completed.

- ① Press **STANDBY-ON**  to turn on the recorder.
- ② Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
→ You may go to Channel 1 on your TV, then press the Channel down button on your TV's remote control until you see { **CINEMA LINK** } or { **LANGUAGE AND COUNTRY** } menu appears on the TV.
- If your TV has Cinema Link or a similar feature, downloading of the TV channels (analogue only) will start automatically. As the TV channels information is downloaded from your TV settings, step 5 will be skipped.

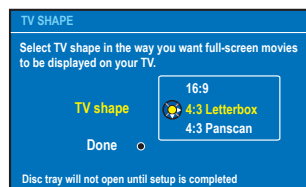


OR

- If { **Language and Country** } menu appears on the TV, use **▲▼** keys to select the desired menu language and press **◀** to confirm.



- ③ Select the country of your residence.
 - i. Highlight { **Country** } and press **▶**, then use **▲▼** keys to select and press **◀** to confirm. If your country is not available in the list, select { **Others** }.
 - ii. Highlight { **Done** } and press **OK** on the remote control.
- ④ The TV shape menu appears on the TV. Select the appropriate TV shape according to the TV you have connected.



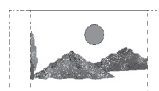
- i. Highlight { **TV Shape** } and press **▶**, use **▲▼** keys to select and press **◀** to confirm.



16:9



4:3 Letterbox



4:3 PanScan

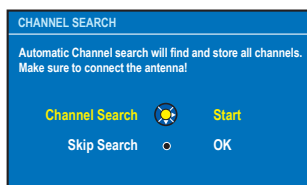
- ii. Highlight { **Done** } and press **OK** on the remote control.

TIPS: After completing the basic installation, you can change or update your settings using the system setup menu, see page 75~81.

Step 3: Installation and Set-up (continued)

- 5 The Channel Search menu appears on then TV. Select { **Channel Search** } in the menu and press **OK** on the remote control to start.

→ It takes a few minutes to complete.

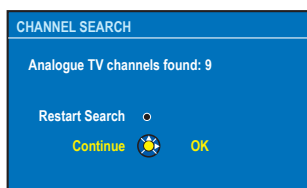


Note: Make sure you have successfully made all the required connections to this recorder, the TV and Satellite Receiver/ Cable Box (if any) and turned them on. The channel search will detect the signals and save all the available programme channels.

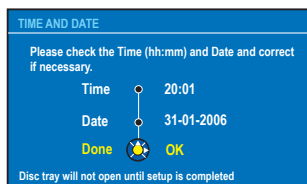
If no channels are found :

– Try the auto TV channel installation after completing the basic installation, see page 78.

- 6 After the channel search is finished, the total number of found and stored channels appears, press **OK** to continue.

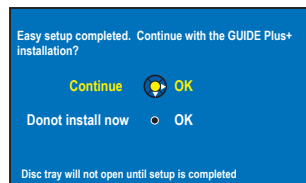


- 7 The time and date menu appears.



- i. If the information is correct, select { **Done** } in the menu and press **OK**.
- ii. If changes are required, use the **alphanumeric keypad 0-9** to enter the correct time and date in the respective field.

- 8 The basic installation is now completed.



- i. Select { **Continue** } in the menu and press **OK** to start the GUIDE Plus+ installation. See next page for the complete detailed setup.
 - ii. Select { **Do not install now** } in the menu to skip the GUIDE Plus+ installation. The next time when you want to install the GUIDE Plus+ system, press **GUIDE** on the remote control, see next page.
- 9 Wait until the recorder has finished initialising the system, then press **OK** to exit.

You may now enjoy using this recorder.

Helpful Hint:

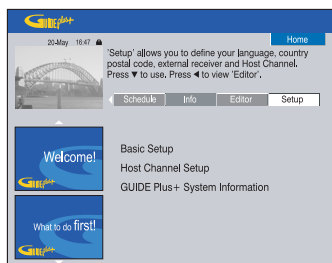
– The TV programme listings do not appear on the GUIDE Plus+ system as soon as you complete the basic installation. It may take up to 24 hours to receive TV listings data.

TIPS: After completing the basic installation, you can change or update your settings using the system setup menu, see page 75–81.

Step 4: Set-up the GUIDE Plus+ system

Your recorder is equipped with the GUIDE Plus+ system. This system offers a free interactive programme guide that lists all the TV programmes available in your area. Before you can enjoy this feature, you have to define your geographic location and your current setup devices in order to receive correct GUIDE Plus+ TV listing data.

- 1 If an introduction to the GUIDE Plus+ system appears on the TV, read the contents and press **OK** to continue.
→ The GUIDE Plus+ basic setup menu appears.
- 2 Otherwise, press **GUIDE** on the remote control, then press **▲** and press **▶** repeatedly until you select the { **Setup** } menu bar.



- 2 Press **▼** to select { **Basic Setup** } in the menu and press **OK** to access the setup screen.



{ **Language** } / { **Country** }

These settings will be taken from the basic installation set up.

{ **Postal code** }

Press **OK** to access the entry menu. Use **▲▼** keys to enter the local postal code and use **◀▶** keys to move to previous or next entry field.

Note: The postal code you enter must be correct, and must represent a postal code in the identified country. If not, you will receive no or incorrect TV listings data.

{ **External Receiver 1/2/3** }

Note: If you do not have an external receiver connected, leave the fields as "None" and press the Red button on the remote control to exit the menu. Go direct to step 8.

You can connect up to three external receivers (e.g., satellite receiver, cable box) to this recorder. Complete the installation of the external receiver as follows:

- a) Use **▲▼** keys to select External Receiver 1, 2 or 3 and press **OK**.
- b) Press **OK** again to continue. Select the type of the external receiver and press **OK**.

{ **Cable** }

Select this for cable receiver, cable box.

{ **Satellite** }

Select this for satellite receiver.

{ **Terrestrial** }

Select this for digital terrestrial decoder box.

- c) Select the service provider from the list and press **OK**.

{ **None** }

Select this if you do not have a provider.

- d) Select the brand of your receiver from the list and press **OK**.

{ **None** }

Select this if you do not find your brand.

TIPS: After completing the setup, leave the recorder in standby mode and turn on your external receivers overnight to receive the TV listing data.

Step 4: Set-up the GUIDE Plus+ system (continued)

- e) Identify the socket through which your external receiver is plugged into the recorder (for example 'EXT 2' for EXT2 AUX-I/O) and press **OK**.
- { **Antenna (RF lead)** }
- Select this if the external receiver is connected via the antenna cable. Enter the programme number which your external receiver is turned on your recorder.
- 3 If you have connected an external receiver, ensure that the G-LINK transmitter is properly connected and positioned, see page 19.
→ This will allow you to control the tuner of the Satellite Receiver/Cable Box through the GUIDE Plus+ system.
 - 4 Turn on the external receiver and **use the receiver's remote control** to select programme number {02} on the receiver.
 - 5 Press **OK** to continue.
→ The GUIDE Plus+ system is sending signal via the G-LINK connection to the external receiver to switch to a certain programme number.
 - 6 If the external receiver has switched to the programme number displayed on the TV, select { **Yes** } and press **OK**.
→ Otherwise, select { **No** } and press **OK** to try a different code. Repeat this process until the external receiver switches to another programme number.
 - 7 Press the **Green** button to return to the setup screen.
 - 8 If you want to specify the source and programme number of a GUIDE Plus+ host channel, select { **Host Channel Setup** } in the menu and follow the instructions on the TV to complete the setup.
→ The default host channel setup is set to 'Automatic'.
 - 9 Once complete, press **GUIDE** to exit the menu.
 - 10 Leave the recorder in 'standby' mode during the night to load the TV listing data.
- If you use an External Receiver, you have to tune your External Receiver manually to your host channel, see below table for details. **Leave the External Receiver 'ON' overnight.**
- Note:** If you tune to your Host Channel before going into 'standby', your recorder will start immediately to download TV listings data. This process can take up to two (2) hours. You can stop the download at any time by turning the device 'on'.
- Visit www.europe.guideplus.com/En/help/countries_hostchannels.html for more and latest information on the supporting host channels.

Country/City (Language)	Host Channel (aerial / cable)	Host Channel (SAT)
Austria	Eurosport	Eurosport ASTRA 1C, 1H HOT BIRD 7A
Belgium	RTL-TV1	
France	Canal +	ATLANTIC BIRD3
Germany	Eurosport	Eurosport ASTRA 1C, 1H
Italy	MTV	
Netherlands	Eurosport	Eurosport ASTRA 1C, 1H HOT BIRD 7A
Luxembourg	RTL-TV1	
Spain	Tele 5	
Switzerland(Deutsch)	Eurosport	Eurosport ASTRA 1C, 1H
United Kingdom	ITV (terrestrial) Eurosport	Eurosport UK ASTRA 2A

- Check your TV listings line-up on the { **Editor** } screen the next day to ensure the data download is completed, see page 31.

Helpful Hints:

- If your country/region is not in the list above or you are not able to receive TV listings data, you can still use the GUIDE Plus+ system for ShowView / VIDEO Plus+ and manual recordings.
- If a problem comes up during the GUIDE Plus+ system set-up, visit the website at www.europe.guideplus.com for further assistance.

TIPS: After completing the setup, leave the recorder in standby mode and turn on your external receivers overnight to receive the TV listing data.

Using the GUIDE Plus+ system

GUIDE Plus+ system introduction

After the GUIDE Plus+ setup and data download is completed, you can start to explore the different features and areas of the GUIDE Plus+ system.

- 1 Press **GUIDE** on the remote control.
- 2 Use ◀▶▲▼ keys to navigate in the menu.

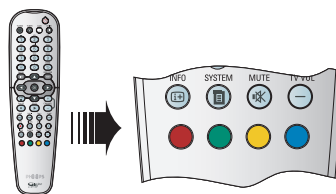


The GUIDE Plus+ system is divided in six screen components:

- (A) **Information Panels** – Display instructions on the GUIDE Plus+ system, programme promotions and advertisements.
 - (B) **Video Window** – Shows the picture of the current TV programme. You can continue to watch the current programme while entering the GUIDE Plus+ system.
 - (C) **Action Bar** – Displays the available functions. The action buttons are activated directly with the respective colour coded buttons on the remote control.
 - (D) **Information Box** – Displays short programme descriptions or help menus.
 - (E) **Menu Bar** – Displays the GUIDE Plus+ menus and your current selection.
 - (F) **Grid/Tiles** – Displays the TV listings information by channel and time, seven days in advance.
- If certain channels are missing, go to the { **Editor** } screen to check and change the channels, see page 31.

Quick access functions

There are several features integrated in the GUIDE Plus+ system. These functions will be displayed at the top Action Bar © whenever applicable. You can access the function by pressing the matching colour coded button on the remote control.



Schedule recordings

- Select a programme you wish to record and press the **Red** button on the remote control for **Record**.
 ➔ You can store up to 25 TV programmes for recording.

Select a specific channel programme

- Press the **Yellow** button on the remote control for **Channels** to view the logos of all the available channels in your area, press **OK** to select.

Helpful Hint:

– The shows you have scheduled for recording can be reviewed and edited in the 'Schedule' screen, see page 30.

TIPS: Press **Blue** button to return to the current time in the 'Grid' screen.
 Press **GUIDE** to exit the menu.

Using the GUIDE Plus+ system (continued)

GUIDE Plus+ menu bar

The GUIDE Plus+ system consists of seven areas in the menu bar:



- 1 Press **GUIDE** on the remote control.
→ The GUIDE Plus+ screen appears.
- 2 Press **▲** to highlight the menu bar, then press **◀▶** to select a menu bar option and press **▼** to access.
→ The information on the individual menu bar is described in the following pages.

'Grid' screen

The Grid screen is the main TV listings screen of the GUIDE Plus+ system. It provides you with seven days of TV listings information.



- 1 Use **▲▼** keys to select a desired TV channel.
- Press **CHANNEL + / -** to scroll down/up a page at a time.
- 2 Use **◀▶** keys to select a programme.
- Press **◀◀ / ▶▶** to go directly to the previous day's or the next day's TV listings.
- 3 Press **OK** to start viewing.

'Search' screen

The Search screen allows you to locate the programme listings by category. It enables you to quickly and easily find something of interest to watch or record.



- 1 Select { **Search** } and press **▼**.
- 2 Use **◀▶** keys to select a search category: { **Movies**, **Sport**, **Children**, **Others** or **My Choice** }.
- 3 Use **▲▼** keys to select a sub-category and press **OK** to start the search.
→ All the programmes for the next seven days in this sub-category are displayed by date and time.
→ Select { **All** } to receive results for all sub-categories in this category.
- 4 Use **◀▶▲▼** keys to select a programme and press **OK** to start viewing.

To set your own search keywords:

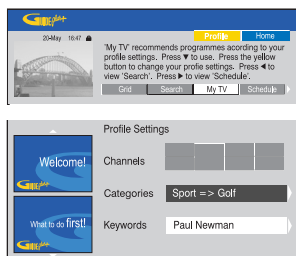
- 1 Select { **My Choice** } and press **▼**.
- 2 Press the **Yellow** button on the remote control for **Add**.
- 3 Use **◀▶▲▼** keys to enter your keyword and press **OK** to confirm.
- 4 Press the **Green** button for **Save**.
- 5 Highlight your keyword and press **OK** to start the search.

TIPS: Press **Blue** button to return to the current time in the 'Grid' screen.
Press **GUIDE** to exit the menu.

Using the GUIDE Plus+ system (continued)

'My TV' screen

The My TV screen allows you to set up a personal profile. You can define the profile by channels, categories and/or by keywords. It enables you to quickly and easily find something of interest to watch, or record.



- 1 Select { **My TV** } and press ▼.
- 2 Press the **Yellow** button on the remote control for **Profile**.
- 3 Use ▲▼ keys to select { **Channel** }, { **Categories** } or { **Keywords** }.
- 4 Press the **Yellow** button for **Add**.
 - { **Channel** }
 - Select a channel from the 'Channel' screen and press **OK**.
 - Repeat this step to add more channels (up to 16).
 - { **Categories** }
 - Select a category from the 'Search' screen and press **OK**.
 - Repeat this step to add more categories (up to 4).
 - { **Keywords** }
 - Use ◀▶▲▼ keys to enter your keywords and press **OK** to confirm.
 - Repeat this step to add more keywords (up to 16).
- 5 Press **OK** to activate your profile.

'Schedule' screen

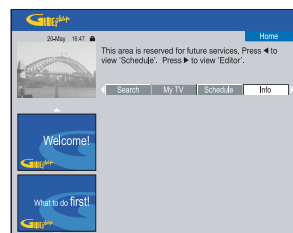
The Schedule screen allows you to examine, delete and edit the scheduled recordings. Additionally, you are able to set a recording here using ShowView/VIDEO Plus+ or Manual. See pages 40~41 for more information.



Note: In the UK and Ireland the ShowView system is called VIDEO Plus+ system and ShowView Programming Number is called PlusCode Programming Number.

'Info' screen

The Info screen is reserved for additional information such as News, Weather Reports, Stock Quotes, etc. The information can be broadcast in the same way as the TV listings data and may vary by region.



If there are no categories available, no data has been provided yet.

TIPS: Press **Blue** button to return to the current time in the 'Grid' screen.
Press **GUIDE** to exit the menu.

Using the GUIDE Plus+ system (continued)

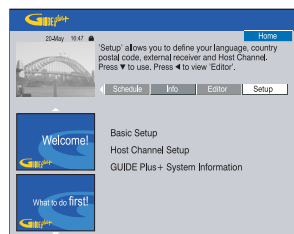
'Editor' screen

The Editor screen is the central location for you to manage your channels. Every change in the Editor leads to a change in the Grid. You can assign programme numbers to the TV channels, switch a channel On or Off and select a channel source (Tuner, External Receiver).



'Setup' screen

The Setup screen is the central location for you to configure the GUIDE Plus+ system according to your personal situation (Region, TV reception). In addition you have the option to set up your Host Channel and to view the GUIDE Plus+ system information screen.



- 1 Select { **Editor** } and press **▼**.
→ The display of the Editor screen depends on the specific TV reception environment of your area.

To turn On/Off the channel

- 2 Move to the left tile of the channel that you want to change, then press **Red** button on the remote control.
→ The 'On' channels' programme listings will be displayed in Grid screen.

To change the Source

- 3 Move to the right tile of the channel that you want to change, then press **Red** button to change the source (e.g., Tuner, Ext. Rec. 1, etc.).
→ The programme number changes automatically to reflect the new source.

To change the Programme Number

- 4 Move to the right tile of the channel that you want to change, then press the **Green** button and use the **alphanumeric keypad 0-9** to enter the programme number.

For a detailed description of the GUIDE Plus+ setup process, see pages 26~27.

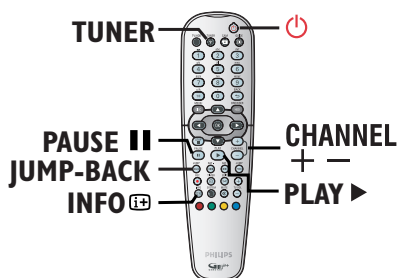
To make changes to the Setup



- 1 Select { **Setup** } press **▼**.
- 2 Highlight { **Basic Setup** } and press **OK**.
- 3 Move the highlight to the part that you would like to change (Language, Country, Postal Code, External Receiver 1, 2, 3) and press **OK**.
- 4 Follow the instructions on the TV to make the necessary changes and press **OK**.
→ Some changes might require a new download of TV listings information. This can take up to 24 hours.

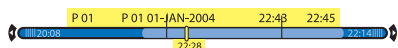
TIPS: Press **Blue** button to return to the current time in the 'Grid' screen.
Press **GUIDE** to exit the menu.


Control TV Programmes

Switching on to TV programme




- 1 Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
- 2 Press **STANDBY-ON**  to turn on this recorder.
→ If no TV programme appears on the screen, press **TUNER** on the remote control.
- 3 Press **CHANNEL**  to select a TV channel.
→ The active TV programmes will be stored automatically onto the temporary HDD storage in this recorder. The information is shown on the Time Shift video bar.
- If you switch to another TV channel on the recorder, a new title will be created and a vertical line will be shown on the Time Shift video bar.



- You can choose to display or hide the Time Shift video bar by pressing the **INFO**  button on the remote control.

For more information about the temporary HDD storage (Time Shift Buffer), see next page.

Pause live TV function

Sometimes, you might be interrupted when watching your favourite TV programme or match. Now, you can pause the show by pressing **PAUSE II** on the remote control and press **PLAY**  to resume playback. It behaves exactly as if you were in control of the live broadcast.

If you want to return to the live TV programme, just press **TUNER**.

Instant replay function

When watching a live TV programme, you can press **JUMP-BACK** on the remote control to jump back one (1) minute (default setting) upon every single press for instant replay.

If you want to return to the live TV programme, just press **TUNER**.

FlexTime function

You do not need to wait until the recording is completed before starting playback.


While the recording is in progress, press **▲** on the remote control to go back to the beginning of the recording and start playback, or hold down **◀◀** until you reach the scene to begin.

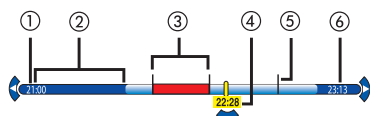
TIPS: Press **INFO** on the remote control to display or remove the Time Shift video bar.

Before Recording

About temporary HDD storage/Time Shift video bar

The current TV programme will be stored in the temporary hard disk storage called '**TSB**' (Time Shift Buffer) once the recorder is turned on. It will continuously store up to 6 (six) hours of TV programmes.


The Time Shift video bar will appear on the TV. It indicates the status and timing of the TV programmes stored in the temporary HDD storage. You can choose to display or hide the video bar by pressing the **INFO**  button on the remote control.



The Time Shift video bar consists of the following information:

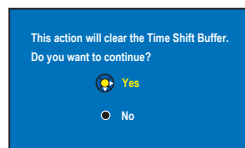
- ① The TV programme start time.
Once it has exceeded 6 (six) hours, the beginning of the contents will be deleted and the start time will be changed accordingly.
- ② Remaining space in the temporary storage.
- ③ Clips that are selected to be recorded onto the HDD (marked Red).
- ④ Current position and time of the TV programme broadcast.
- ⑤ Title markers (when you switch to a TV channel for more than 1 minute, a new title marker will be created)
- ⑥ Present time

Warning!

The temporary HDD can only store up to 6 hours of TV programmes. All the contents will be cleared when you press **STANDBY-ON** .

In addition, executing the following actions will also clear the contents in the temporary HDD storage :

- Press **CAM** on the remote control.
- Enter to { **Set up** } or { **Record mode** } option in the system setup menu.



- i. To proceed and clear the contents in the temporary HDD storage, press **OK** on the remote control to select { **Yes** } in the menu, OR
- ii. Select { **No** } in the menu and press **OK** on the remote control to abort.

Marking the contents for recording

You need to 'mark' the contents in the temporary HDD storage before it can be recorded to the hard disk drive (HDD), see page 36.

To select a title (programme)

- Press **INFO**  to show the overview panel and use **▲▼** keys to select a title.

To find a scene within the title

- Use **◀▶** keys.

To record the programme currently highlighted on the time shift buffer

- Press **REC**  once.

Note: In the countries where no GUIDE Plus+ TV listings data is available or no such data is stored, pressing REC will start recording from the beginning of the current channel, up to 6 (six) hours. Press REC repeatedly to set the recording length by 30-minute increments.

To mark the starting point of recording

- Press the **Red** button.

To mark the end of the recording

- Press **STOP** .

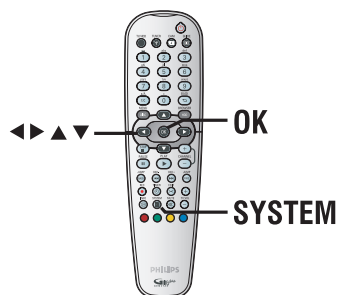
To cancel the marked recording

- Press the **Red** button.

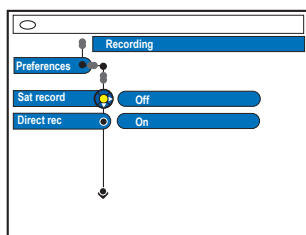
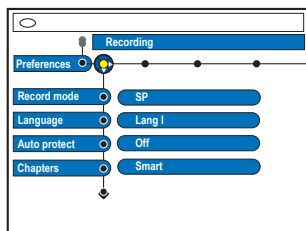
Before Recording (continued)

Default recording settings

You can preset your recording settings in the recording setup menu.



- 1 Press **SYSTEM** on the remote control.
→ The system setup menu appears.
- 2 Press ▼ to select { **Preferences** }.
- 3 Press ► to select { **Recording** }.



- 4 Use ▲▼ keys to select the setting you wish to change and press ► to access its options.
→ Instructions and explanations of the options are provided in the following pages.
→ If the selection in the menu is greyed out, that means the feature is not available or not possible to change at the current state.
- 5 To exit, press **SYSTEM**.

Record Mode settings chart

Record Mode	Hours of recordings can be stored on the L HDD or an empty DVD recordable disc.		
	HDD (250 GB)	DVDR/DVDRW	DVDR L Double Layer
HQ (high quality)	47	1	1 hr 55 mins
SP (standard play)	95	2	3 hrs 40 mins
SPP (standard play plus)	119	2.5	4 hrs 35 mins
LP (long play)	143	3	5 hrs 30 mins
EP (extended play)	191	4	7 hrs 20 mins
SLP (super long play)	287	6	11 hrs 5 mins
SEP (super extended play)	400	8	14 hrs 45 mins

Helpful Hints:

- Changing the Recording Mode will clear the contents in the temporary HDD storage, only the marked contents (in red bar) will be recorded onto the hard disk drive (HDD) of this recorder.
- Your TV picture quality will be changed according to the selected recording mode.

Before Recording (continued)

Recordings (underlined options are the factory default settings)

Record mode

The recording mode defines the picture quality of recordings and the maximum recording time on the HDD (hard disk drive), see page 34 on 'Recording Mode Setting Chart'.

Important! When copying from HDD to a recordable DVD, the recording mode of the selected recording in the HDD will automatically be transferred. Selecting another recording mode is not possible. The factory default setting is SP.

Language

Selects the recording language to be used for TV programmes which are transmitted an additional audio language. For example, if a programme is available in English and Spanish, with Spanish being the additional language option.

- { Lang I } – Original broadcast language.
- { Lang II } – Additional audio language.

Note: To make an immediate recording with the optional audio language, press **SYSTEM** on the remote control and access the { Toolbar - Options }, then select the language in the { AUDIO } option.

Auto protect

With this feature turned on, the new recording titles will be automatically protected.

- { On } – Deletes and edits on the recorded titles are not possible.
- { Off } – Turns off the function.

Chapters

Automatically divides a recording (title) into chapters by inserting chapter markers at a specific interval. This enables you to access a specific point in the recording quickly.

- { Off } – No chapter marker is inserted in the recording.
- { Standard } – Chapter markers are inserted automatically during recording at approximately 5 (five) minutes interval.
- { Smart } – This setting is only available for the DV camcorder recording. A chapter marker is inserted whenever there is a break in the recording, for example, when the recording is stopped or paused and restarted again.

SAT record

This feature is only available if you have connected a Satellite Receiver or other devices to the EXT 2 AUX-I/O scart socket of this recorder, see page 38 for more information.

- { Off } – Turns off the function.
- { EXT2 } – Enables this recorder to start and stop recording when a signal is received from the connected device.

Direct rec.

With this feature, you can immediately record the programme that you are viewing on the TV by pressing REC button without needing to turn on this recorder, see page 38 for more information.

- { On } – Enables recording directly from the TV display.
- { Off } – Turns off the function.

Record to Hard Disk

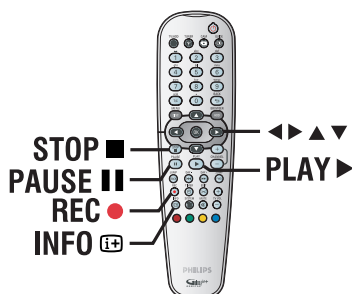
IMPORTANT!

Unrecordable contents

Contents with copy protection cannot be recorded on this recorder. When the recorder receives a copy guard signal, it will continue to record. However, during playback, only blank or grey picture will be displayed.

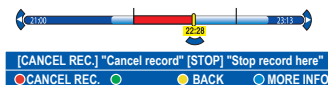
Recording TV programmes

Follow the instructions below to record the TV programmes onto the HDD, where you can store for future viewing and copy to a recordable DVD disc if required.



Record the current TV programme

- 1 Press **INFO** on the remote control to display the Time Shift video bar.
- 2 Press **REC** on the remote control.
 - The current programme will be marked for recording.
 - In the countries where no GUIDE Plus+ TV listings data is available or no such data is stored, it will start recording the current channel from the last channel marker onwards for the next 6 (six) hours.



- 1 Press **REC** again will set the recording time length. Each subsequent press increases the recording time by 30-minute, up to a maximum of 6 (six) hours.
- 3 You can turn off your TV and the recorder to standby mode while recording.
 - The recorder will continue recording and stop at the designated end time.
- If you wish to stop the recording before the scheduled time, press **STOP** .

Record a specific section of TV programmes

- 1 Press **INFO** on the remote control to display the Time Shift video bar.
- 2 Use **▲▼** keys to select a TV programme that can be found in the temporary HDD storage.
- 3 Use **◀▶** keys to search for the beginning of the scene where you want to start recording, then press **PAUSE II**.
- 4 Press the **Red** button on the remote control to start recording from here.
- 5 Press **PLAY** to continue playback.
- 6 Press **▶** to search for the point where you want to end the recording and press **STOP** on the remote control.
 - A red marking will be visible on the video bar to indicate the marked recording.

TIPS: Set the appropriate recording mode. It determines the actual recordable time to the HDD or a recordable DVD, see page 35.

Record to Hard Disk (continued)

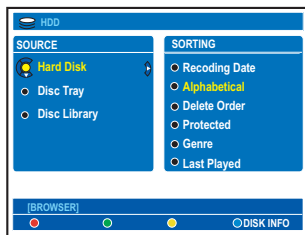
Simultaneous record and play function

While recording the TV programme to the HDD is in progress, you can play a previously recorded title from the HDD, or play a DVD video disc, or watch the playback from other connected devices.



Playback from HDD

- 1 Press **HDD-BROWSER**, then press ► repeatedly until the title menu appears.



- 2 Use ▲▼ keys to select a title in the HDD content menu and press **PLAY** ► to start playback.

Playback from DVD

- Press **OPEN CLOSE** ▲ on the recorder's front panel and load in a disc to start playback.

Playback from other device

This is only possible if this recorder is connected to the TV using the EXT1 TO TV-I/O socket.

- Press **TV/HDD** to view the picture from the device which is connected to the EXT2 AUX-I/O socket of this recorder.
- If there is no device connected to the EXT2 AUX-I/O socket, pressing **TV/HDD** will switch to the TV mode.

Watching other TV programmes

- Use the TV's channel up/down button to select a different TV channel.

Helpful Hint:

– Remember to turn the TV back to its video input channel if you want to watch the TV channel through the recorder or play back the recorded disc.

TIPS: Set the appropriate recording mode. It determines the actual recordable time to the HDD or a recordable DVD, see page 35.

Record to Hard Disk (continued)

Direct recording from TV

If you have connected this recorder to your TV using a scart cable, you can immediately start recording the programme which is currently being shown on the TV while the recorder is in standby mode.

- ① Ensure that the { **Direct rec.** } mode in the recording setting is turned on (see page 35).
- ② While watching the TV programme, press **REC** ● on the remote control to start recording.
- ③ To stop recording, press **STOP** ■.
→ Otherwise, it will stop automatically after 6 (six) hours of recording.

Helpful Hint:

– Direct recording is not possible from the device connected to the EXT2 AUX I/O scart socket.

Automatic recording from Satellite Receiver

The feature is only applicable for the Satellite Receiver (or any similar devices) that is connected to the EXT2 AUX-I/O scart socket of this recorder. In addition, the Satellite Receiver must have a timer function that is able to control the recording function of this recorder.

- ① Ensure that the { **Sat record** } mode in the recording setting is set to { **EXT2** } (see page 35).
- ② Use the Satellite Receiver's timer programming function to program the recording (refer to the Satellite Receiver's user manual).
→ You can only programme up to 6 (six) hours of recording.
- ③ Leave the recorder and Satellite Receiver in standby mode for the recording.
→ You have to turn off the Satellite Receiver to standby mode before the recorder.
→ The recorder will start recording when it detects a signal from the Satellite Receiver.

Helpful Hint:

– The recorder's timer recordings take precedence over automatic satellite recording. Automatic Satellite recording will stop if the recorder's timer recording is due to start.

TIPS: Set the appropriate recording mode. It determines the actual recordable time to the HDD or a recordable DVD, see page 35.

Record to Hard Disk (continued)

About timer recording

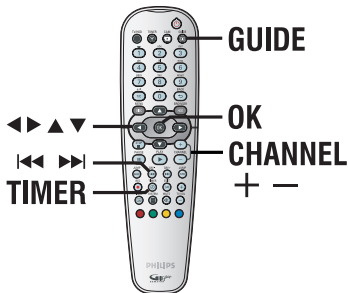
Use the timer recording to automatically start and stop a recording at a later date/time. This recorder will tune to the right programme channel and begin recording at the specified time.

With this recorder, you can schedule up to **25 recordings** at a time and up to 6 (six) hours for each recording. During timer recording, changing the recorder's channel is not possible.

Note: If the scheduled timer recording is longer than 6 (six) hours, it will split into two or more titles.

There are three ways to program a timer recording

- Using the GUIDE Plus+ system
- Using the ShowView / VIDEO Plus+ system
- Using manual timer recording



About 'VPS/PDC'

'VPS' (Video Programming System) or 'PDC' (Programme Delivery Control) is used to control the start and duration of TV channel recordings. If a TV programme starts earlier or ends later than was scheduled, this recorder will then turn on and off at the correct time.

Timer recording (GUIDE Plus+ system)

To schedule a recording with the GUIDE Plus+ system, simply select the desired programme from the channel list.

- 1 Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
- 2 Turn on the recorder and press **GUIDE** on the remote control.
→ The GUIDE Plus+ screen appears.



Note: If the GUIDE Plus+ setup menu appears, it means that this recorder has not been installed with the GUIDE Plus+ programme data yet. See pages 26~27 to set-up the GUIDE Plus+ system.

- 3 Use **▲▼** keys to select a desired TV channel and use **◀▶** keys to select a programme.
- Press **CHANNEL** **+** / **—** to scroll down/up a page at a time.
- Press **◀◀** / **▶▶** to go directly to a day before or the next day TV listings.
- 4 Press the **Red** button on the remote control for **Record**.
- 5 Press **GUIDE** to exit the menu.

TIPS: Set the appropriate recording mode. It determines the actual recordable time to the HDD or a recordable DVD, see page 35.

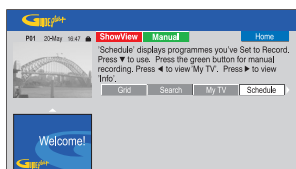
Record to Hard Disk (continued)

Timer recording (ShowView / VIDEO Plus+ system)

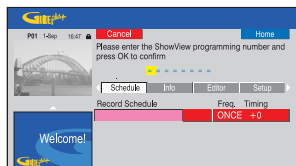
This is a simple timer programming system. To use it, enter the ShowView programming number / VIDEO Plus+ PlusCode® programming number associated with your television programme. You can find this number in your TV listings magazine.

All the information needed by this recorder for programming is contained in the programming number.

- 1 Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
- 2 Turn on the recorder and press **TIMER** on the remote control.
→ The GUIDE Plus+ schedule screen appears.

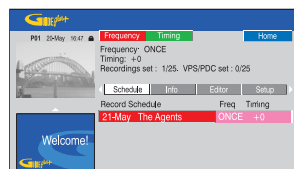


- 3 Press the **Red** button on the remote control for **ShowView** or **VIDEO Plus+**.
→ The ShowView / VIDEO Plus+ entry screen appears.



Note: In the UK and Ireland the ShowView system is called VIDEO Plus+ system and ShowView Programming Number is called PlusCode Programming Number.

- 4 Use the **alphanumeric keypad 0-9** to enter the ShowView / VIDEO Plus+ programming number and press **OK** to confirm. (e.g. 5-312-4 or 5,312 4, key in '53124').
→ The GUIDE Plus+ system is decrypting the programming number and transforming it into a scheduled event.



- If an incorrect programming number is entered, you have to select the correct programme number manually. Follow the instructions on the TV to edit the date and time.
- 5 The default recording settings are displayed in the pink tile. To make changes, press the matching colour coded button on the remote control.

{ Frequency }

Press the **Red** button on the remote control repeatedly to select the repeat recording setting (Once, Weekly, M-F [Monday to Friday]).

{ Timing }

Press the **Green** button on the remote control repeatedly to select adding extra time (+0, +10, +20, +30) to the end of recording or select VPS/PDC (V-P) function.

Note: VPS/PDC is not available for external receiver.

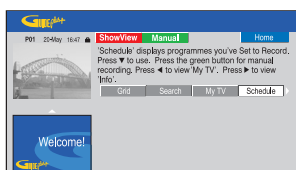
- 6 Press **TIMER** to confirm and exit the menu.
→ The '**TIMER**' icon will light up on the display panel if a timer recording is set.
→ If the recorder is not in standby mode, a notification message will appear before the timer recording begins.
→ If you ignore the message, the recorder will automatically switch to the respective channel and start recording.

TIPS: Set the appropriate recording mode. It determines the actual recordable time to the HDD or a recordable DVD, see page 35.

Record to Hard Disk (continued)

Timer recording (manually)

- 1 Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
- 2 Turn on the recorder and press **TIMER** on the remote control.
→ The GUIDE Plus+ schedule screen appears.



- 3 Press the **Green** button on the remote control for **Manual**.
→ The recording date appears.



- 4 Use ◀▶▲▼ keys or **alphanumeric keypad 0-9** to enter the recording information (date, start time, end time) and press the **Green** button to confirm each entry and go to the next parameter.
- 5 When 'TUNER 01' appears on the display, select the input source and enter the programme channel.
→ To select an external input channel, highlight 'TUNER' in the menu and use ▲▼ keys to select { EXT1 }, { EXT2 } or { CAM1 }.
→ To select an internal TV channel, highlight '01' in the menu and use the **alphanumeric keypad 0-9** to enter the programme channel.

- 6 Press the **Green** button to confirm and go to the next parameter.

→ A virtual keyboard appears on the TV for entering the title name.

- 7 Once complete, store the setting by pressing the **Green** button for **Save**.

→ The scheduled manual recording will be displayed.

- 8 The default recording settings are displayed in the pink tile. To make changes, press the matching colour coded button on the remote control.

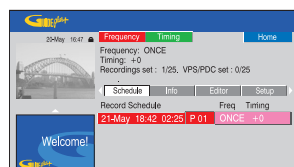
{ Frequency }

Press the **Red** button on the remote control repeatedly to select the repeat recording setting (Once, Weekly, M-F [Monday to Friday]).

{ Timing }

Press the **Green** button on the remote control repeatedly to select adding extra time (+0, +10, +20, +30) to the end of recording or select VPS/PDC (V-P) function.

Note: VPS/PDC is not available for external receiver.



- 9 Press **TIMER** to confirm and exit the menu.

→ The '**TIMER**' icon will light up on the display panel if a timer recording is set.

→ If the recorder is not in standby mode, a notification message will appear before the timer recording begins.

→ If you ignore the warning, the recorder will automatically switch to the respective channel and start recording.

TIPS: Set the appropriate recording mode. It determines the actual recordable time to the HDD or a recordable DVD, see page 35.

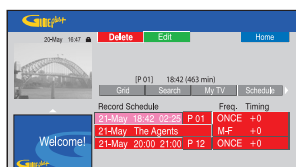
Record to Hard Disk (continued)

Changing/Deleting a timer recording

- 1 Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
- 2 Turn on the recorder and press **TIMER** on the remote control.
→ The GUIDE Plus+ schedule screen appears.



- 3 Press ▼ to select a timer programme which you want to delete/edit.



To delete the timer programme

- Press the **Red** button on the remote control for **Delete**.

To edit the timer programme

- Press the **Green** button on the remote control for **Edit**, and follow the instructions on the TV to make the necessary changes/entry.

To edit the Frequency/Timing

- Highlight the respective tile in the menu and press the **Red** button to change the frequency or the **Green** button to change the timing.
- 4 Once complete, press **TIMER** to confirm and exit the menu.

TIPS: Set the appropriate recording mode. It determines the actual recordable time to the HDD or a recordable DVD, see page 35.

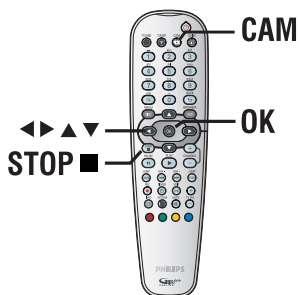
Record to Hard Disk or recordable DVD

Recording from a DV Camcorder

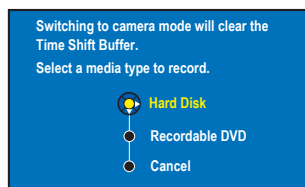
When you connect a DV camcorder to the DV IN socket of this recorder, you can control both the camcorder and this recorder using the recorder's remote control. Furthermore, the smart chaptering feature ensures the chapter markers are created at each break in the images.

Before you start...

- Mark the contents in the temporary HDD storage (time shift buffer) for which you wish to record to the HDD, see page 33. Otherwise, all the contents will be cleared when you start camcorder recording.
- Set the date and time at { **DV Specials** } if required for DV update recording function, see page 73.



- ① Connect your Digital Video or Digital 8 camcorder to the **DV IN** socket of this recorder (see page 22).
- ② Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
- ③ Press **CAM** on the remote control.
→ Media type selection screen appears.



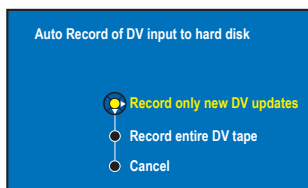
- ④ To continue, select to record to { **Hard Disk** } or { **Recordable DVD** } in the menu and press **OK** to confirm.
→ All the contents in the temporary HDD storage will be cleared, only the 'marked' contents will be stored onto the HDD.
- Otherwise, select { **Cancel** } in the menu and press **OK** to abort the operation.
- ⑤ Turn on the DV camcorder and start playback.



TIPS: Set the appropriate recording mode. It determines the actual recordable time to the HDD or a recordable DVD, see page 35.

Record to Hard Disk or recordable DVD (continued)

- 6 Press the **Blue** button on the remote control for { **AUTO REC** }.



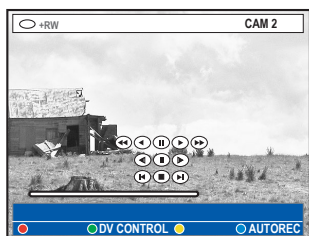
Note: The { **AUTO REC** } option can only be activated while in camcorder play or pause mode.

To copy the entire DV tape

- Select { **Record entire DV tape** } in the menu and press **OK** to confirm.
→ The camcorder will rewind the tape and start recording from the beginning.

To copy the newly recorded contents from the DV tape

- Select { **Record only new DV updates** } in the menu and press **OK** to confirm.
→ The recordings which are later than the date and time set in the { **DV Specials** } (see page 73) will be recorded onto the HDD or recordable DVD.
- 7 To use the recorder's remote control to control the camcorder operation during recording, press the **Green** button on the remote control for { **DV CONTROL** }.
→ The DV control buttons display on the screen.



- 8 You can pause, play, stop, fast forward or rewind the scene using the ◀▶▲▼ keys on the recorder's remote control to select the respective control buttons on the screen.
- 9 To stop the recording, press **STOP** ■.
→ Both the recorder and camcorder will stop.
- 10 To exit, press **TUNER**.

Helpful Hints:

- Some camcorders cannot be controlled using this recorder's remote control.
- Mixing of PAL and NTSC video format recording on a same recordable DVD is not possible.
- If a part of the tape is blank, the recorder will pause recording. Recording will restart automatically when there is a recordable signal. However, if there is more than 5 (five) minutes of blank tape, the recording will end automatically.
- A chapter marker is inserted every time when there is a break in the time code on the DV tape. This happens when the recording is stopped or paused then restarted.

TIPS: Set the appropriate recording mode. It determines the actual recordable time to the HDD or a recordable DVD, see page 35.

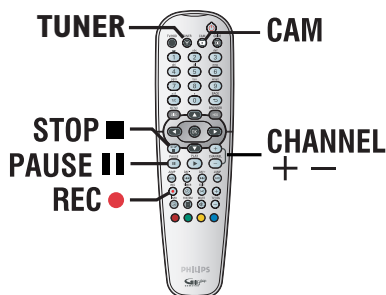
Record to Hard Disk or recordable DVD (continued)

Recording from camcorder

When you connect the camcorder to the VIDEO or S-VIDEO socket at the front panel of this recorder or the EXT1 or EXT2 socket at the back panel, follow the steps below to make the camcorder recording.

Before you start...

Mark the contents in the temporary HDD storage (time shift buffer) for which you wish to record to the HDD, see page 33. Otherwise, all the contents will be cleared when you start camcorder recording.



- 1 Connect the camcorder to this recorder (see page 23).
- 2 Find the place on the camcorder that you want to start recording from and set the camcorder to pause mode.
- 3 Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
- 4 Turn on the recorder and press **CAM** on the remote control.
→ Media type selection screen appears.

- 5 To continue, select to record to { **Hard Disk** } or { **Recordable DVD** } in the menu and press **OK** to confirm.
→ All the contents in the temporary HDD storage will be cleared except for the 'marked' recordings.
- Otherwise, select { **Cancel** } in the menu and press **OK** to abort the operation.
- 6 Press **CHANNEL** **+** **-** repeatedly to select the correct input channel that matches the connected socket of the device.
→ { **CAM 1** } : S-VIDEO or VIDEO socket at the front.
→ { **EXT 1** } : EXT1 TO TV-I/O scart socket at the back.
→ { **EXT 2** } : EXT2 AUX-I/O scart socket at the back.
- 7 Press **REC** ● to start recording and press **PLAY** button on the camcorder to start playback.
- To pause the recording, press **PAUSE** ▮ .
To continue recording, **PAUSE** ▮ again.
→ A new chapter marker is created after recording restarts.
- 8 To stop the recording, press **STOP** ■ .
→ A new title will be created when you begin another recording.
- 9 To exit, press **TUNER**.

TIPS: Set the appropriate recording mode. It determines the actual recordable time to the HDD or a recordable DVD, see page 35.

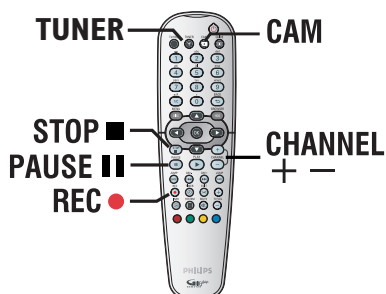
Record to Hard Disk or recordable DVD (continued)

Recording from an external device (VCR/DVD player)

You can record from an external device which is connected to this recorder's input socket. Copy-protected material cannot be recorded on this recorder.

IMPORTANT!

It is not possible to record the disc playback from this recorder to its HDD.



- ① Connect the external device to this recorder (see page 20).
- ② Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
- ③ Turn on the recorder and press **CAM** on the remote control.
→ Media type selection screen appears.

- ④ To continue, select to record to { **Hard Disk** } or { **Recordable DVD** } in the menu and press **OK** to confirm.
→ All the contents in the temporary HDD storage will be cleared except for the 'marked' recordings.
- Otherwise, select { **Cancel** } in the menu and press **OK** to abort the operation.
- ⑤ Press **CHANNEL** + **-** repeatedly to select the correct input channel that matches the connected socket of the device.
→ { **CAM 1** } : S-VIDEO or VIDEO socket at the front.
→ { **EXT 1** } : EXT1 TO TV-I/O scart socket at the back.
→ { **EXT 2** } : EXT2 AUX-I/O scart socket at the back.
- ⑥ Start playback on the connected device.
- ⑦ Press **REC** ● to start recording.
- To pause the recording, press **PAUSE** || .
To continue recording, **PAUSE** || again.
→ You can use this function to avoid unwanted recording.
→ A new chapter marker is created after recording restarts.
- ⑧ To stop the recording, press **STOP** ■.
- ⑨ To exit, press **TUNER**.

Helpful Hint:

– If 'X' appears at the bottom of the TV screen, it means that there is no video signal received from the current input channel.

TIPS: Set the appropriate recording mode. It determines the actual recordable time to the HDD or a recordable DVD, see page 35.

Copy from Hard Disk to recordable DVD

IMPORTANT!

- It is not possible to record the TV programmes or the scheduled timer programmes directly to a recordable DVD. You can only record it to the HDD and then copy to a recordable DVD.
- Copy protected (Copy-Once or Copy-Never) movies and DVD Videos cannot be copied to the HDD.

About copying

You can copy a recorded title from the HDD (hard disk drive) to a recordable DVD.

The time required for copying from HDD to a recordable DVD depends on the recording mode of the HDD recordings. It is not possible to change the recording mode for the copying process. It is therefore important that you choose the appropriate recording mode when you set up the recording to the HDD.

The copying process is done at a higher speed than the recording. The maximum copying speed is up to 8x. You cannot shorten the time required for recording even with high-speed discs.

HDD → Recordable DVD

HDD recording mode	Hours of recordings can be stored in an empty 4.7GB recordable DVD	Time required for copying 1 hour of recording
HQ	1	25 mins
SP	2	12.5 mins
SPP	2.5	10 mins
LP	3	8 mins
EP	4	6 mins
SLP	6	4 mins
SEP	8	3 mins

The following information will be stored on the disc :

- Recording mode
- Title/name of recording
- Date and time of recording
- Index picture of title

Discs for recording

Three different types of DVD recordable discs can be used with this recorder:



DVD±RW (DVD Rewritable)

- Discs that are re-writable can be used for multiple recordings once existing data is erased.



DVD±R (DVD Recordable)

- Discs can only be used for a single recording. Each new recording is always added at the end of all previous recordings as existing recordings cannot be overwritten.
- Editing can be done on DVD±R discs as long as they have not been finalised.
- You can also delete unwanted recordings. However, the disc space occupied by the deleted recordings cannot be recovered for further recording.
- To play a DVD±R disc on other DVD players, it must be finalised (see page 69). After this is done, no more data can be added to the disc.



DVD+R DL (DVD+R Double Layer)

- It contains the same usage as DVD+R, the only difference is the capacity- 8.5GB. It offers two recordable layers on a single DVD disc. The layers are accessible from the same side of the disc, so recording can occur completely uninterrupted.

TIPS: Ensure that there is sufficient space available on the recordable DVD before recording. You have to finalise the DVD±R before it can be played on other players, see page 69.

Copy from Hard Disk to recordable DVD (continued)

Copying to a recordable DVD

You can copy any recordings from the HDD to a recordable DVD. The storage capacity of the disc depends on the recording mode that was selected for the recordings in the HDD, see page 35.

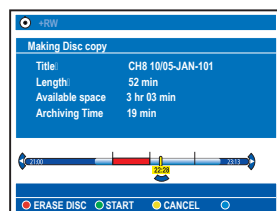
Before you start...


Be sure that no other recording is to be carried out while copying (e.g. timer recording).

- 1 Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
- 2 Insert a recordable DVD into the recorder.
- 3 Press **HDD-BROWSER** on the remote control.
→ The content menu appears.
- 4 Press **▶** repeatedly until the { **TITLES** } and { **INFO** } menus appear.



- 5 Use **▲▼** keys to select a title to copy.
- 6 Press the **Green** button on the remote control for { **COPY** }.
→ The making disc copy information appears.



- If you are using a DVD±RW for recording, you can press **◀◀** / **▶▶** to select the space in the disc where you want the recording to be placed (e.g. the space of a deleted title).
- For DVD±RW, you can erase all the disc contents in order to create space for new recording. Press the **Red** button for { **ERASE DISC** }.
- If copy an edited title (marked with ) in the HDD, all the attributes of the recording (including hidden chapter markers) will be transferred. Only unhidden chapters will be playback.
- 7 To start recording, press the **Green** button again for { **START** }.
→ "HDD TO DVD" appears on the display panel during copying process.
→ While copying the recordings from HDD, any interruption to the process (e.g. power failure) may lead to a bad disc.
- Otherwise, press the **Yellow** button for { **CANCEL** } to abort the operation.
→ Press **INFO** will call out the coloured options at the bottom of the screen.

Helpful Hints:

- In some cases, you may not be able to add new recording to a recordable DVD that contains recordings from other DVD recorders.
- If the newly recorded title in the HDD is not accessible, turn the recorder off and on again to recover the recording.
- If you are unable to fit a title in the HDD to a recordable DVD, split the unwanted sections into multiple titles. Refer to the section 'Video Editing' in the user manual for further assistance.

To edit your recordings on the recordable DVD, see pages 67~71.

TIPS: Ensure that there is sufficient space available on the recordable DVD before recording. You have to finalise the DVD±R before it can be played on other players, see page 69.

Using the Disc Library

The Disc Library is an integrated database in this recorder. It gives you a quick and easy access to the recordings you have made onto the recordable DVDs.

The Disc Library keeps the information on which video is recorded on which disc, length of recording and remaining disc space.

Storing the recorded DVD data in the Disc Library

This recorder will assign the disc a number, and keep track of what you have recorded and update the data automatically whenever you add in new recording to the disc.

- 1 Press **HDD-BROWSER** on the remote control and press **▼** to select { **Disc Tray** }.
- 2 Load in a recordable DVD.
→ If { **TO LIBRARY** } appears, it means this disc has not been added to the Disc Library.

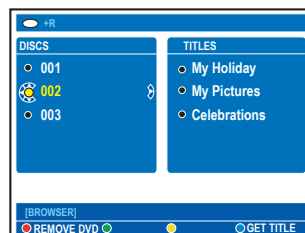


- 3 Press the **Blue** button on the remote control for { **TO LIBRARY** }.
→ The assigned disc number appears and the disc tray opens automatically
- 4 Write the same disc number on the disc and disc's cover for easy locating of the appropriate disc next time, then press **OK** to exit.

Finding a recorded title

To do this, the recorded disc data must have been stored in the Disc Library. The appropriate disc does not have to be in the recorder.

- 1 Press **HDD-BROWSER** on the remote control.
- 2 Press **▼** to select { **Disc Library** }, then press **►** to select { **SORTING** } menu.
- 3 Use **▲▼** keys to select one of the sorting options.
→ { **Alphabetical** } - Lists all the titles by alphabetical order.
→ { **Numerical** } - Lists all the discs by numerical order.
- 4 Press **►** repeatedly until the { **DISCS** } or { **TITLES** } and { **INFO** } menus appears.



- 5 Highlight the title you want and press the **Blue** button on the remote control for { **GET TITLE** }.
→ A message showing the disc number appears.
- 6 Load the appropriate disc and start playback.
- If the disc library becomes full, you will have to delete some of the discs data in order to use the memory for new discs. Select a disc number from the { **DISCS** } menu, then press the **Red** button for { **REMOVE DVD** }.

TIPS: Up to 999 discs can be stored in the disc library, maximum titles per disc is 999. In total you can store up to 9000 titles.

Playback from Hard Disk

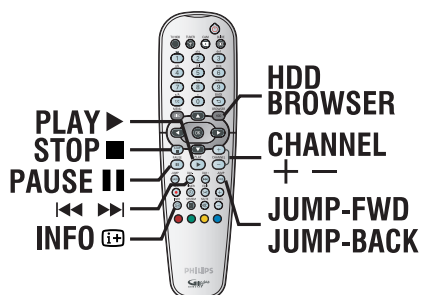
Basic operation

Each recording stored on the HDD is displayed in the HDD browser with an index picture.

- 1 Press **HDD-BROWSER** on the remote control.
→ The content menu appears.
- 2 Press **▶** repeatedly until the { **TITLES** } and { **INFO** } menus appear.



- Symbols at the { **INFO** } menu indicating:
 - title is still part of the recording in the 'Time Shift Buffer'.
 - title is locked.
 - title is protected.
 - title has been viewed.
 - title has been edited.
- 3 Use **▲▼** keys to select a title and press **PLAY ▶** to start playback.
- 4 During playback, you can use the following buttons on the remote control to access additional playback features.



◀◀ / ▶▶

- move to the beginning or previous/next chapter.
- hold down this button for fast backward/forward search. Press the button again to increase the search speed (x4, x8, x32).
- while in pause mode, start slow motion playback.

JUMP-BACK/JUMP-FWD

- jump backward/forward by a fixed time period, see page 76.

PAUSE ||

- view a still picture.

INFO i+

- display the title information.

STOP ■

- stop playback.

Viewing the hard disk information

- 1 Press **HDD-BROWSER**.
- 2 Press the **Blue** button on the remote control for { **DISK INFO** }.
→ Total hard disk space and the available free space for recording will be displayed.
→ If the free space is below 10%, delete or unprotect some titles in the HDD. Maximum free space indication is 90%.

HARD DISK INFO	
Total space	400GB
Free space	54%

Helpful Hint:

- When the hard disk is full, pressing **RECORD** button will delete the oldest unprotected titles automatically from the hard disk in order to make space for the new recording.

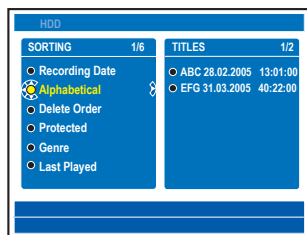
TIPS: Press **HDD-BROWSER** to exit the menu.

Playback from Hard Disk (continued)

Sorting the titles display order

You may organise the titles in a specific order according to certain criteria for easy locating the recordings. This order will remain until you exit the content menu.

- 1 Press **HDD-BROWSER** on the remote control.
→ The content menu appears.
- 2 Press **▶** to select the { **SORTING** } menu.



- 3 Use **▲▼** keys to select one of the following sorting options.

{ **Recording Date** }

Lists the titles by the date recorded.

{ **Alphabetical** }

Lists the titles by alphabetical order.

{ **Delete Order** }

Lists the titles by deletion order when the HDD has no or less space for new recordings. Deletion of title has to be done manually.

{ **Protected** }

Lists the titles by protected against deletion.

{ **Genre** }

Lists the titles by the genre you have specified.

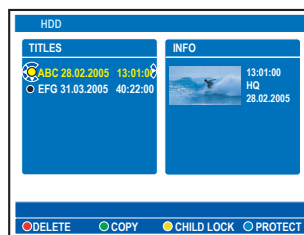
{ **Last Played** }

Lists the titles by the sequence of titles last played.

Delete/Protect a title in the HDD

A number of editing options are displayed at the bottom of the HDD content menu. They can be accessed via the matching colour coded buttons on the remote control.

- 1 Press **HDD-BROWSER** on the remote control.
→ The content menu appears.



- 2 Use **▲▼** keys to select a title.
- 3 Press the matching colour coded button on the remote control to access the options displayed at the bottom of the menu.

{ **DELETE** }

Red button – Delete the selected title from the hard disk.

{ **COPY** }

Green button – Copy the selected title from the hard disk to a recordable DVD.

{ **CHILDLCK** } / { **CHLD UNLCK** }

Yellow button – Lock or unlock the selected title from viewing. A four-digit pin code is required to play the locked disc/title or to unlock the disc/title (see page 74).

{ **PROTECT** } / { **UNPROTECT** }

Blue button – Protect or unprotect the title against editing or accidental loss of recordings.

TIPS: Press **HDD BROWSER** to exit the menu.

Playback from Disc

Playable discs

Using this recorder, you can play and record on the following discs:

Recording and Playback

DVD±RW (DVD Rewritable); can be recorded on over and over and can only be played back when the recording was made in 'video mode'.



DVD±R (DVD Recordable); once the disc is full or finalised, you cannot record any more on the disc. It can only be played back when the recording was made in 'video mode' and finalised.



DVD+R DL (DVD+R Double Layer); same as DVD±R.



Playback only:

DVD Video (Digital Versatile Disc)



Audio CD (Compact Disc Digital Audio)



Video CD
(Formats 1.0, 1.1, 2.0)



Super Video CD




CD-R (CD-Recordable)
Audio/Video format or
MP3/JPEG files.









CD-RW (CD-Rewritable)
Audio/Video format or
MP3/JPEG files.



IMPORTANT!

- If the inhibit icon 'X' or  appears on the TV screen when a button is pressed, it means the function is not available on the current disc or at the current time.
- DVD discs and players are designed with regional restrictions. Before playing a disc, make sure the disc is for the same region zone as your player.

Starting disc playback

- 1 Press **STANDBY-ON**  to turn on the recorder.
- 2 Press **OPEN CLOSE**  on the front of the recorder.
 - You can also hold down the **STOP**  button on the remote control to open and close the disc tray.
- 3 Carefully place the disc into the tray with the label facing up, then press **OPEN CLOSE** .
 - For double-sided discs, load the side which you want to play facing up.
- 4 Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
- 5 Playback may start automatically. If not, press **HDD-BROWSER** to show the content menu. Highlight { **Disc Tray** } in the menu and press . Navigate in the menu to select a track/title and press **PLAY** .
 - If the pin code entry dialogue appears on the TV, this means that the child lock was activated for the inserted disc. You have to enter your four-digit pin code (see page 74).
 - For more playback features, see pages 56~61.

TIPS: Some discs cannot be played on this DVD recorder due to the configuration and characteristics of the disc, or due to the condition of recording and authoring software that was used.

Playback from Disc (continued)

Playing a DVD video disc

Normally the DVD disc contains a disc menu. You may have to make your selection (e.g., subtitle or audio language) within the disc menu.

- 1 Insert a DVD.
- If the disc menu appears, use the **alphanumeric keypad 0-9** to input your selection or use **▲▼** keys to select a play option and press **OK** to confirm.

To access the content menu

- Press **DISC-MENU** on the remote control.

To select the previous or next chapter/title

- During playback, press **T/C** on the remote control to select 'TITLE' or 'CHAPTER', then press **◀▶** / **▶▶**.
- 2 To stop playback, press **STOP ■**.

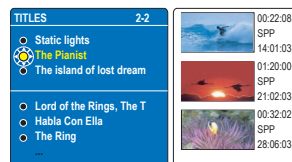
Playing a (Super) Video CDs

(Super) Video CDs may feature 'PBC' (Play Back Control). This allows you to play the video CDs interactively, following the menu on the display.

- 1 Insert a (Super) Video CD.
 - If the disc index menu appears, use the **alphanumeric keypad 0-9** to input your selection or use **▲▼** keys to select a play option and press **OK** to confirm.
 - To return to the previous menu, press **BACK** on the remote control.
- 2 To stop playback, press **STOP ■**.

Playing a DVD recordable disc

- 1 Insert a DVD recordable disc.
→ The Index Picture screen appears.



- 2 Use **▲▼** keys to select a title to play, then press **PLAY ▶**.
- 3 To stop playback, press **STOP ■**.

Helpful Hint:

– If the message 'EMPTY DISC' appears on the display panel, this means that there are no recordings on this disc.

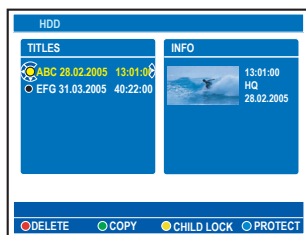
TIPS: Some discs cannot be played on this DVD recorder due to the configuration and characteristics of the disc, or due to the condition of recording and authoring software that was used.

Playback from Disc (continued)

Playing an MP3 CD

MP3 (MPEG I Audio Layer-3) files are highly compressed music files. The MP3 format lets you store about ten times more data (music, pictures) on a single CD-ROM than a regular CD.

- 1 Insert an MP3 CD.
→ The content menu appears.
- Otherwise, press **HDD-BROWSER** and select { **Disc Tray** } in the menu.
- 2 Press **▶** repeatedly until the { **ALBUMS** } and { **TRACKS** } menus appear.



- 3 Use **◀▶▲▼** keys to select the album and track to play, then press **PLAY ▶**.
- 4 During playback, you can press **◀◀ / ▶▶** to select the next/previous track.
- 5 To stop playback, press **STOP ■**.

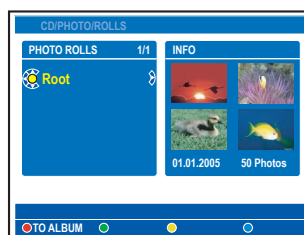
Helpful Hints:

- Only the first session of a multi-session CD will be played back.
- Further information on the album, track and artist will also be displayed on the TV if this is included in the ID tag.
- If both JPEG pictures and MP3s are in the same disc, only the JPEG pictures can be played back.
- This recorder does not support MP3PRO audio format.

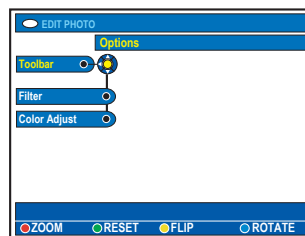
Playing a JPEG image file (slide show)

You can display JPEG pictures in the selected roll automatically one after the other at adjustable intervals.

- 1 Insert a JPEG photo CD (CD, DVD±RW, DVD±R).
→ The content menu appears.
- Otherwise, press **HDD-BROWSER** and select { **Disc Tray** } in the menu.
- 2 Press **▶** repeatedly until the { **PHOTO ROLLS** } and { **INFO** } menus appear.



- 3 Press **PLAY ▶** to start the slide show playback or press **OK** to show the thumbnail pictures overview.
- You can edit the displayed photo by pressing **EDIT** on the remote control to access to { **Filter** } and { **Colour Adjust** } settings, or press the matching colour coded button on the remote control to zoom, flip or rotate the photo.

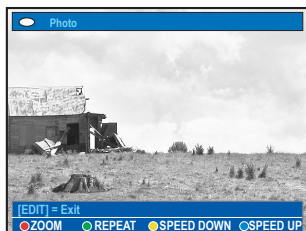


However, the changes cannot be stored on the HDD or a recordable DVD.

TIPS: Some discs cannot be played on this DVD recorder due to the configuration and characteristics of the disc, or due to the condition of recording and authoring software that was used.

Playback from Disc (continued)

- During playback, the available playback settings are displayed at the bottom of the screen.



{ ZOOM }

Red button – Select this to activate zoom mode. The slideshow playback will pause.

- { **ZOOM IN** } Blue button: enlarge the picture.
- { **ZOOM OUT** } Yellow button: revert to the actual size.
- { **END** } Red button: exit zoom mode and continue slideshow playback.

{ REPEAT }

Green button – Select this to toggle between repeat on and off.

{ SPEED DOWN } / { SPEED UP }

Yellow and Blue buttons – Select this to change the slideshow playback speed.

- { **SLOW** }: 10 (ten) seconds interval
- { **MEDIUM** }: 5 (five) seconds interval
- { **FAST** }: 3 (three) seconds interval

- 4 To stop playback, press **STOP** ■.

Helpful Hints:

- If both JPEG pictures and MP3s are in the same disc, only the JPEG pictures can be played back.
- If the JPEG picture is not recorded with an 'exif' type file, the actual thumbnail picture will not be shown on the display. It will be replaced with a 'blue mountain' thumbnail picture.
- Some types of JPEG file cannot be played on this recorder.
- It may require longer time for the recorder to display the disc content on the TV due to the large number of songs/pictures compiled into one disc.
- Disc with no name will be displayed as 'Unknown Data'.
- If any special characters are present in the MP3 track name (ID3) or album name, it might not be displayed correctly on the screen because this recorder does not support the characters.

Supported JPEG picture formats

File format:

- The file extension has to be '*.JPG' and not '*.JPEG'.
- It can only display DCF-standard still pictures or JPEG pictures e.g. TIFF. It cannot play back moving pictures, Motion JPEG, progressive JPEG and other formats, or pictures in formats other than JPEG, or pictures associated with sound e.g. AVI-files.

TIPS: Some discs cannot be played on this DVD recorder due to the configuration and characteristics of the disc, or due to the condition of recording and authoring software that was used.

Additional Playback Features

Creating a slideshow playlist (album)

You can customise the JPEG picture slideshow playback within a disc by storing your selection in an album.

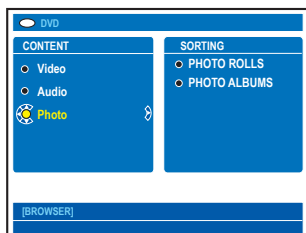
This recorder can handle up to a maximum of 100 JPEG pictures in one album on a recordable disc, depending on the JPEG file parameters.

- 1 Collect your favourite photos from the 'PHOTO ROLLS' and add to an album for creating a new slideshow playlist.
→ See "Adding photos to an album".
- 2 If necessary, edit the photos in the album.
→ See "Edit the album".
- 3 Select the photo album in the menu and press **PLAY ►** to start the slideshow playback.

About Photo Roll/Photo Album

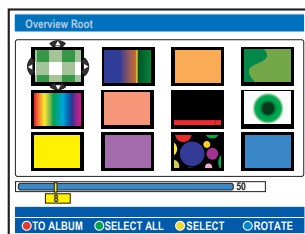
Photo roll is a folder for storing original JPEG pictures and they are protected. It is comparable with a conventional 35mm film for cameras. Rolls will be created automatically from the digital cameras.

Photo album contains different JPEG pictures created from the rolls. You can delete an album without deleting the pictures of the rolls.



Adding photos to an album

- 1 Insert a JPEG photo CD (CD, DVD±RW, DVD±R).
→ The content menu appears.
- 2 Otherwise, press **HDD-BROWSER** and select { **Disc Tray** } in the menu.
- 2 Press **►** repeatedly until the { **PHOTO ROLLS** } and { **INFO** } menus appear.
- 3 Select a photo roll folder and press **OK** to show the thumbnail pictures overview.



- 4 Use **◀▶▲▼** keys to select the photo which you wish to add to the album and press the **Yellow** button on the remote control for { **SELECT** }.
 - To select all the photos, press the **Green** button for { **SELECT ALL** }.
 - To rotate the selected photo in 90 degree clockwise increments, press the **Blue** button for { **ROTATE** }.
- 5 Press the **Red** button on the remote control for { **TO ALBUM** }.
→ The 'Add to Photo Albums' menu appears.
- 6 Create a new album or select an existing album, then press **OK** to add the photo(s) to it.
→ The selected photos are now stored in the album.

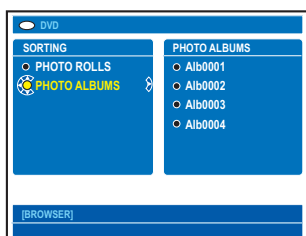
TIPS: Press **BACK** to go back to previous menu item.

Additional Playback Features (continued)

Edit the album

You can re-arrange the picture position in the album in order to create the desired slideshow playback order, or remove the photo(s) from the album. The order and number of the pictures in the 'PHOTO ROLLS' remains unchanged.

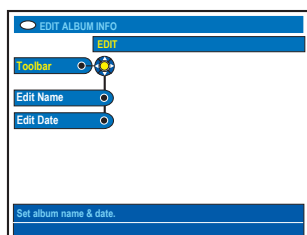
- 1 Insert a JPEG photo CD (CD, DVD±RW, DVD±R).
→ The content menu appears.
- Otherwise, press **HDD-BROWSER** and select { **Disc Tray** } in the menu.
- 2 Press ► to select the { **SORTING** } menu and press ▼ to select 'PHOTO ALBUMS'.



- 3 Press ► again to access the { **PHOTO ALBUMS** } menu and use ▲▼ keys to select an album.

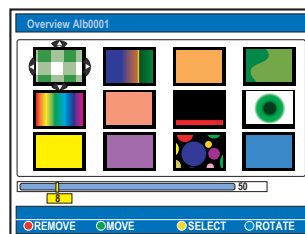
To change the album name and date

- Select the album and press **EDIT** on the remote control. Make the necessary changes on the respective fields and press **OK** and **EDIT** to exit the menu.



To delete the album

- Select the album and press the **Red** button on the remote control for { **DELETE** }.
- 4 Press **OK** to show the thumbnail pictures overview.



- 5 Use ◀▶▲▼ keys to select the photo which you wish to move and press the **Yellow** button on the remote control for { **SELECT** }.
- 6 Press the **Green** button on the remote control for { **MOVE** }.
→ A 'navigator' will appear on the menu, it enables you to select the position between the photos.
- 7 Use ◀▶▲▼ keys to move the 'navigator' around the menu and press **OK** to confirm the position where you want to insert the photo(s).

To rotate a photo

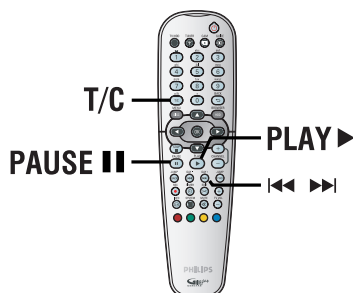
- Select the photo in the menu and press the **Blue** button for { **ROTATE** }.

To remove a photo from the album

- Select the photo in the menu and press the **Red** button on the remote control for { **REMOVE** }.

TIPS: Press **BACK** to go back to previous menu item.

Additional Playback Features (continued)



Selecting another title/ chapter/ track

When a disc contains more than one track, title or chapter, you can change to a different track, title or chapter as follows.

During playback,

- Press **▶▶I** to go to the next title/ chapter/track.
- Press **I<<<** to return to the start of the current title/chapter/track. Pressing **I<<<** twice can return to the start of the previous title/chapter/track.

OR

- Use the **alphanumeric keypad 0-9** to input the title/chapter/track number.
- OR
- Press **T/C** on the remote control to select “T” (title) or “C” (chapter), then press **I<<< / ▶▶I** to select the title/ chapter number.

Searching forwards/ backwards

You can fast forward or fast reverse a disc during playback and select a desired search speed.

- ① During playback, hold down **I<<<** (reverse) or **▶▶I** (forward) until the search speed status bar (-4X or 4X) appears on the TV.
→ The sound will be muted.
- ② Press the **I<<<** (reverse) or **▶▶I** (forward) repeatedly to cycle through the different search speed (-4X, -8X, -32X, 4X, 8X, 32X).
- ③ To resume normal playback, press **PLAY ▶**.

Pausing playback / slow motion play

- ① During playback, press **PAUSE II** to pause playback and display a still picture.
- ② Hold down **I<<<** (reverse) or **▶▶I** (forward) until the slow motion status bar (-1/8X or 1/8X) appears on the TV.
→ The sound will be muted.
- ③ Press the **I<<<** (reverse) or **▶▶I** (forward) repeatedly to cycle through the different slow motion speed (-1/8X, -1/4X, -1/2X, 1/8X, 1/4X, 1/2X).
- ④ To resume normal playback, press **PLAY ▶**.

TIPS: The operating features described here might not be possible for certain discs. Always refer to the instructions supplied with the discs.

Additional Playback Features (continued)

During playback, you can press **SYSTEM** on the remote control to display the available playback options. These options can be selected by pressing the matching colour coded buttons on the remote control.



Scan disc

(for CD, VCD, DVD±R/±RW disc only)

This function allows you to preview the first 10 seconds of each track on the disc.

- 1 During playback, press the **Red** button on the remote control.
→ The recorder skips to the next track after 10 seconds of playback.
- 2 To resume normal playback, press the **Red** button again.

Shuffle play

(for CD, MP3 disc only)

Select shuffle play mode to allow the recorder to randomly select and play tracks on the disc.

- 1 Press the **Green** button on the remote control.
→ It will start play back of all the chapters within the title in a random order.
- 2 To cancel shuffle playback, press the **Green** button again.

Repeat play

The repeat play options vary depending on the disc type.

- 1 During playback, press the **Yellow** button on the remote control to select one of the repeat options.
→ Repeat chapter (DVD, DVD±R/±RW only)
→ Repeat track/title
→ Repeat album/playlist (if applicable)
→ Repeat entire disc (video CD, audio CD, DVD±R/±RW only)
- 2 To cancel repeat playback, press the **Yellow** button repeatedly until the repeat mode is off or press **STOP** ■.

Repeating a specific segment (A-B)

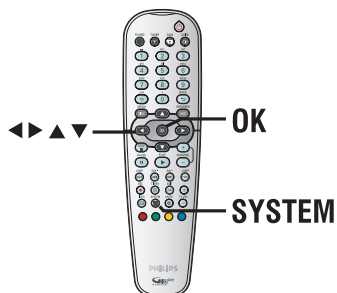
You can repeat the playback of a specific segment within a title/chapter track. To do this, you must mark the start and end of the segment you want.

- 1 During playback, press the **Blue** button on the remote control.
→ This indicates that the start point has been marked.
- 2 Press the **Blue** button again to mark the end of the segment.
→ A visual marker is placed on the programme bar.
→ Playback skips to the start of the marked segment. The segment is repeated until the repeat mode is cancelled.
- 3 To cancel repeat playback, press the **Blue** button once again.

TIPS: The operating features described here might not be possible for certain discs. Always refer to the instructions supplied with the discs.

Additional Playback Features (continued)

Using the Toolbar options



- 1 During playback, press **SYSTEM** on the remote control.
→ The system setup menu appears.
- 2 At { **Toolbar** }, press ► to select { **Options** }.
→ The available options might differ depending on the situation and disc type.



- 3 Use ▲ ▼ keys to select the setting you want to adjust.
→ Instructions and explanations of the options are provided in the following pages.
→ If the selection in the menu is greyed out, that means the feature is not available or cannot be changed in the current state.
- 4 To exit, press **SYSTEM**.

Changing subtitle language

This operation works only on DVDs with multiple subtitle languages. You can change to the language you want while playing DVD.

This function can also be accessed via the **Green** button on the remote control while in disc playback mode.

- 1 Press ▼ to select { **Subtitle** } and press ► to enter its options.
- 2 Press ▼ repeatedly until the language you want is selected, then press ◀ to confirm.
→ The languages may be numbered or abbreviated, such as "En" for English.

Helpful Hint:

– Some DVDs discs allow subtitle language changes only via the DVD disc menu. To access the disc menu, press DISC-MENU.

Changing audio soundtrack language

This operation works only on DVDs with multiple soundtrack language or VCDs with multiple audio channel.

This function can also be accessed via the **Red** button on the remote control while in disc playback mode.

- 1 Press ▼ to select { **Audio** } and press ► to enter its options.
- 2 Press ▼ repeatedly until the audio language you want is selected, then press ◀ to confirm.
→ The languages may be numbered or abbreviated, such as "En" for English.

Helpful Hint:

– Some DVDs allow soundtrack language changes only via the DVD disc menu. To access the Disc Menu, press DISC-MENU.

TIPS: The operating features described here might not be possible for certain discs. Always refer to the instructions supplied with the discs.

Additional Playback Features (continued)

Switching camera angles

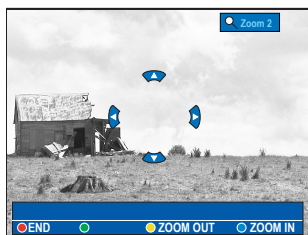
This option is only available with DVDs that contain sequences recorded from different camera angles. This allows you to view the picture from different angles.

- 1 Press **▼** to select { **Angle** } and press **►** to enter its options.
→ The camera angles available for selection appear.
- 2 Use **▲ ▼** keys to select the camera angle you want to switch to, then press **◀** to confirm.

Zooming in

This option allows you to enlarge the picture on the TV screen and to pan through the enlarged picture.

- 1 Press **▼** to select { **Zoom** } and press **►** to enter zoom in mode.
→ The zoom status bar appears and displays the zoom factor.



- 2 Press the **Blue** button on the remote control to zoom in or **Yellow** button to zoom out.
- 3 Use **◀ ▶ ▲ ▼** keys to pan through the zoomed picture.
- 4 To exit zoom mode, press the **Red** button.

Searching by time

This option allows you to skip to a specific point in the current disc.

- 1 Press **▼** to select { **Time search** } and press **►** to enter the time field (hours : minutes : seconds).
- 2 Use the **alphanumeric keypad 0-9** to enter the time where playback should start and press **OK** to confirm.
→ Playback skips to the time entered.

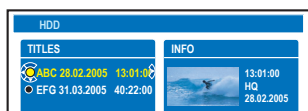
TIPS: The operating features described here might not be possible for certain discs. Always refer to the instructions supplied with the discs.

Edit Recordings - Hard Disk

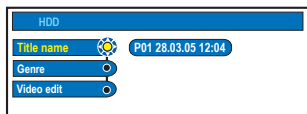
Changing the title name

Some TV channels transmit the name of the programme. In this case, the programme name will automatically be stored when recording to the HDD. Otherwise, only the programme number and date/time of the recording will be stored as title name.

- 1 Press **HDD-BROWSER** on the remote control, then press **►** repeatedly until the { **TITLES** } and { **INFO** } menus appear.



- 2 Use **▲ ▼** keys to select a title and press **EDIT** on the remote control.
→ The HDD edit menu appears.

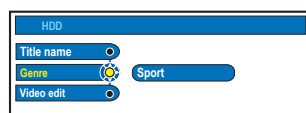


- 3 Select { **Title name** } in the menu and press **►**.
- 4 Use **▲ ▼** keys to change the character/number or make an entry by using the **alphanumeric keypad 0-9**.
→ Use **◀ ▶** keys to move to the previous or next field.
- To switch between upper and lower case characters, press **a/A** on the remote control.
- To clear the title name, press the **Red** button on the remote control for { **CLEAR** }.
- 5 Press **OK** to confirm the changes.

Selecting the genre

You may select the genre type provided in the list for easy and fast searching of a recorded title.

- 1 Press **HDD-BROWSER** on the remote control, then press **►** repeatedly until the { **TITLES** } and { **INFO** } menus appear.
- 2 Use **▲ ▼** keys to select a title and press **EDIT** on the remote control.
→ The HDD edit menu appears.



- 3 Select { **Genre** } in the menu and press **►**.
- 4 Use **▲ ▼** keys to select a genre type and press **OK** to confirm.

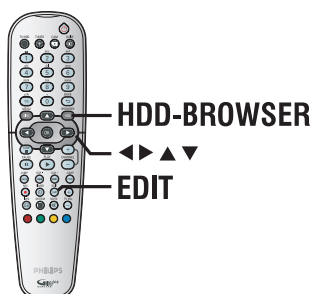
TIPS: No editing can be carried out on a protected title, see page 51.
Press **BACK** to go back to previous menu item. Press **EDIT** to exit the menu.

Edit Recordings - Hard Disk (continued)

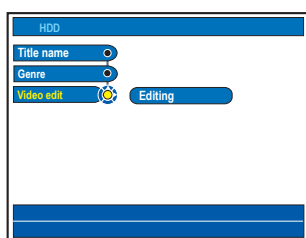
Video editing

This recorder allows you to edit the video content after a recording has been made. You can insert/delete chapter markers or hide unwanted scenes.

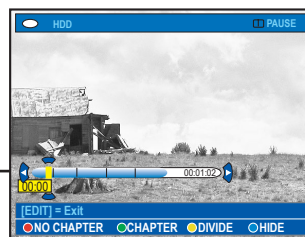
When you play back a recording in video edit mode, the entire recording will be played back including the hidden scenes.



- 1 Press **HDD-BROWSER** on the remote control, then press **▶** repeatedly until the { **TITLES** } and { **INFO** } menus appear.
- 2 Use **▲ ▼** keys to select a title and press **EDIT** on the remote control.
→ The HDD edit menu appears.



- 3 Select { **Video edit** } in the menu and press **▶**.
→ Playback will start automatically.



Video bar:

In the video bar, the record playback head represents the actual position of the playback.

- 4 Press the matching colour coded buttons on the remote control to access the options displayed at the bottom of the menu.

{ **NO CHAPTER** }

Red button – Select this to erase all the chapter markers in the current title.

{ **CHAPTER** }

Green button – Select this to access chapter editing menu.

{ **DIVIDE** }

Yellow button – Select this to divide the recording into two separate titles.

{ **HIDE** } / { **STOP HIDE** }

Blue and Green buttons – Select this to define the scene to hide.

{ **SHOW** } / { **STOP SHOW** }

Blue and Green buttons – Select this to make the hidden scene visible.

- 5 To exit, press **EDIT**.
→ In addition to the original title, the edited title will be appeared with symbol.

Helpful Hint:

– You can delete the edited title without deleting the original title. However, if the original title is being deleted, the edited title will also be deleted.

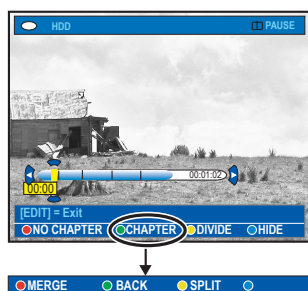
TIPS: No editing can be carried out on a protected title, see page 51.
Press **BACK** to go back to previous menu item. Press **EDIT** to exit the menu.

Edit Recordings - Hard Disk (continued)

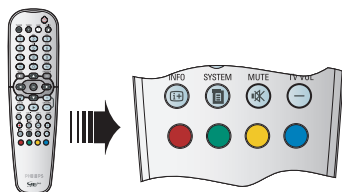
Merge/split a specific chapter within a recording

You can create a chapter by inserting chapter marker (using the SPLIT option) or remove a chapter marker (using the MERGE option).

- 1 During HDD recording playback, press **EDIT** on the remote control.
- 2 Press the **Green** button on the remote control for { **CHAPTER** }.
→ The chapter editing menu appears.



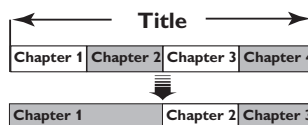
- 3 Hold down **IIII** / **IIII** keys or use **◀** / **▶** keys on the remote control to search for the scene you want to edit, then press **PAUSE II**.
- 4 Press the matching colour coded buttons on the remote control to access the options displayed at the bottom of the menu.



{ **MERGE** }

Select this to merge the current chapter with the chapter before it.

→ If the two chapters were hidden, then the joined chapter will also be hidden.



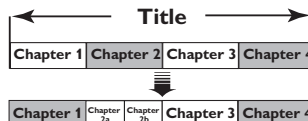
(for example, chapter 2 is being selected)

{ **BACK** }

Select this to return to the previous screen.

{ **SPLIT** }

Select this to insert a new chapter marker at the current point of playback. This will allow you to access a specific point in the recording easily or set a chapter you wish to hide (for example, commercial scenes).



(for example, chapter 2 is being selected)

Helpful Hint:

– There is a limit on chapter markers that can be stored within a title and on the hard disk drive.

TIPS: No editing can be carried out on a protected title, see page 51.
Press **BACK** to go back to previous menu item. Press **EDIT** to exit the menu.

Edit Recordings - Hard Disk (continued)

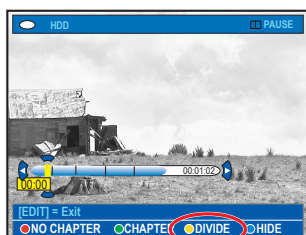
Dividing titles

You can divide a title into two or more titles. You can use this function to separate and delete undesired portions of a recording, such as commercials.

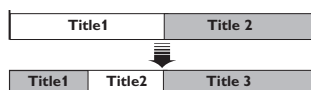
WARNING!

Once a title has been divided, it cannot be reversed.

- 1 During HDD recording playback, press **EDIT** on the remote control.



- 2 Hold down **◀◀** / **▶▶** keys or use **◀** / **▶** keys on the remote control to search for the scene you want to edit, then press **PAUSE II**.
- 3 Press the **Yellow** button on the remote control for { **DIVIDE** }.
→ A new title and new index picture will be created from the current point of playback.

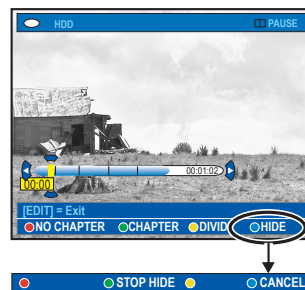


(for example, title 1 is being selected)

Hiding unwanted scenes

You can choose to hide certain scenes for playback (e.g. skipping a commercial scene) or make the hidden scene visible again.

- 1 During HDD recording playback, press **EDIT** on the remote control.
- 2 Hold down **◀◀** / **▶▶** keys or use **◀** / **▶** keys on the remote control to search for the scene you want to edit, then press **PAUSE II**.
- 3 Press the **Blue** button on the remote control for { **HIDE** }.
→ It will set the start marker for hide.



- 4 Hold down **▶▶** key on the remote control to search for the end of the scene to hide, then press the **Green** button for { **STOP HIDE** }.
→ It will set the end marker for hide.
→ The 'hidden' area will be greyed out.
- Otherwise, cancel the operation by pressing the **Blue** button on the remote control for { **CANCEL** }.
- 5 To exit, press **EDIT**.

TIPS: No editing can be carried out on a protected title, see page 51.
Press **BACK** to go back to previous menu item. Press **EDIT** to exit the menu.

Edit Recordings - Hard Disk (continued)

Showing the hidden scene

- 1 During HDD recording playback, press **EDIT** on the remote control.
→ While in video editing mode, the hidden chapter will play.



- 2 Press the **Blue** button on the remote control for { **SHOW** }, it will mark the beginning of scene to show.
- 3 Hold down **▶▶** key on the remote control to search for the end of the scene to show, then press the **Green** button for { **STOP SHOW** }.
- Otherwise, cancel the operation by pressing the **Blue** button on the remote control for { **CANCEL** }.

Helpful Hints:

- All the hidden chapters will be played back while in video editing mode.
- The selection of scenes to hide or show can only be done within a title.

Deleting all chapter markers

During recording, the chapter marker is set automatically at a specific interval if the function is active (see page 35). You can choose to delete all the chapter markers when the recording has finished.

- 1 During HDD recording playback, press **EDIT** on the remote control.



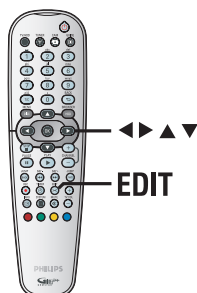
- 2 Press the **Red** button on the remote control for { **NO CHAPTER** }, it will delete all the chapter markers in the current title.

TIPS: No editing can be carried out on a protected title, see page 51.
Press **BACK** to go back to previous menu item. Press **EDIT** to exit the menu.

Edit Recordings - Recordable DVD

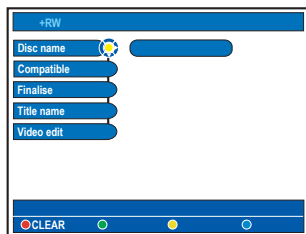
About editing recordable DVDs

This recorder offers various disc edit options. You can change the disc content and settings of a recorded DVD from the editing menu. If a DVD±R has been finalised, it cannot be edited. The edited contents may not be available if you play the disc on another DVD player.



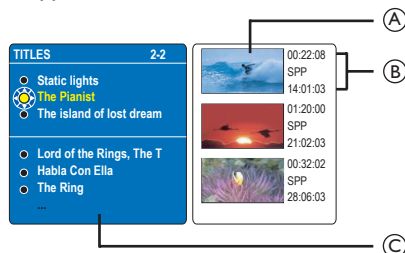
The displayed options in the editing menu differ depending on the situation and disc type.

- Change disc name
- Make DVD compatible (DVD±RW only)
- Finalise disc (DVD±R only)
- Change title name
- Video editing



Index Picture screen

The Index Picture screen shows your recordings on a recordable DVD. It should appear on the TV once you load a recordable DVD or when playback is stopped.



An Index Picture screen represents each recording information saved :

- (A) The title's index picture.
- (B) The length of recording, recording mode and date of recording
- (C) The title's name (or channel number and date)

Helpful Hint:

- If the disc is not recorded from this recorder, the format of index picture screen might be different. You have to adapt the disc menu to the format of this recorder before editing, see page 73.

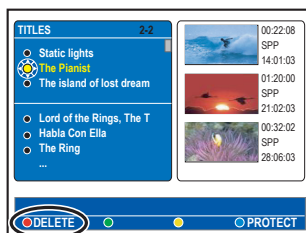
TIPS: No further recording and editing can be carried out on a finalised DVD±R. Press **BACK** to go back to previous menu item. Press **EDIT** to exit the menu.

Edit Recordings - Recordable DVD (continued)

Deleting recordings/titles

You can delete a specific title from the disc. However, for DVD±R discs, the deleted space cannot be used for further recordings.

- 1 Insert a recorded DVD into the recorder.
→ The Index Picture screen appears.
- Otherwise, press **HDD-BROWSER** and select { **Disc Tray** } in the menu, then press **▶**.
- 2 Use **▲ ▼** keys to select a title from the menu.



- 3 Press the **Red** button on the remote control for { **DELETE** }.
- 4 A warning message appears. Press **OK** on the remote control to proceed.
→ For DVD±RW disc, 'Empty Title' will appear in the Index Picture screen where the title was deleted. The empty space can be used for new recordings.
→ For DVD±R disc, 'Deleted title' will appear in the Index Picture screen where the title was deleted. During playback, the deleted title will be skipped.
- Otherwise, select { **Cancel** } in the menu and press **OK** to abort the operation.

Protecting the recorded titles (DVD±RW)

You can choose to protect the recorded title on a DVD±RW in order to prevent the recordings from being accidentally erased or edited.

- 1 Insert a recorded DVD±RW into the recorder.
→ The Index Picture screen appears.
- Otherwise, press **HDD-BROWSER** and select { **Disc Tray** } in the menu, then press **▶**.
- 2 Use **▲ ▼** keys to select a title from the menu.
- 3 Press the **Blue** button on the remote control for { **PROTECT** }.
- Once the title has been protected, the Blue button option will change to { **UNPROTECT** }. Select this to cancel the protect setting if required.



TIPS: No further recording and editing can be carried out on a finalised DVD±R. Press **BACK** to go back to previous menu item. Press **EDIT** to exit the menu.

Edit Recordings - Recordable DVD (continued)

Changing the disc/title name

The original disc/title name is generated automatically by the recorder. You can change the disc/title name by following the steps below.

- ① Insert a recorded DVD into the recorder.
→ The Index Picture screen appears.
- ② Press **EDIT** on the remote control.
→ The editing menu appears.
- ③ Use **▲ ▼** keys to select { **Disc name** } or { **Title name** } in the menu.
- ④ Use **▲ ▼** keys to change the character/number or make an entry by using the **alphanumeric keypad 0-9**.
→ Use **◀ ▶** keys to move to the previous or next field.
- To switch between upper and lower case characters, press **a/A** on the remote control.
- ⑤ Press **OK** to confirm the changes.

Making the edited DVD±RW compatible

The edited DVD±RW may still display the original titles or hidden scenes when played back on other DVD players. This function allows you to make an edited DVD±RW compatible with other players.

- ① Insert a recorded DVD±RW into the recorder.
→ The Index Picture screen appears.
- ② Press **EDIT** on the remote control.
→ The editing menu appears.

- ③ Use **▲ ▼** keys to select { **Compatible** } in the menu and press **OK** to confirm.
→ If the option is not available for selection, it means that the disc is already compatible.

Finalising the DVD±R for playback

It is necessary to finalise a DVD±R disc before you can play it on another DVD player. Otherwise, the DVD±R will only play back on this recorder.

After a DVD±R disc has been finalised, no further recordings or editing can be made to it. Make sure that you have completed all the recordings and editing before finalising the disc.

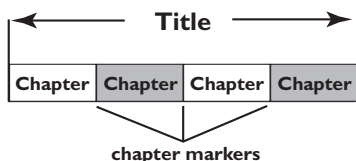
- ① Insert a recorded DVD±R into the recorder.
→ The Index Picture screen appears.
- Otherwise, press **HDD-BROWSER** and select { **Disc Tray** } in the menu, then press **▶**.
- ② Press **EDIT** on the remote control.
→ The edit menu appears.
- ③ Use **▲ ▼** keys to select { **Finalise** } in the menu and press **OK** to confirm.
- ④ A warning message appears. Press **OK** on the remote control to proceed.
→ Finalisation may take more than 30 minutes, depending on the length of recordings.
→ Do not try to open the disc tray or turn the power off as this may render the disc unusable.
- Otherwise, select { **Cancel** } in the menu and press **OK** to abort the operation.

TIPS: No further recording and editing can be carried out on a finalised DVD±R. Press **BACK** to go back to previous menu item. Press **EDIT** to exit the menu.

Edit Recordings - Recordable DVD (continued)

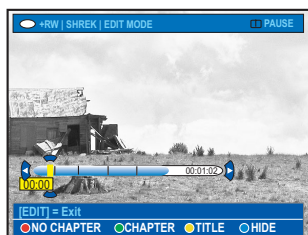
Video editing

This recorder allows you to edit the video content after a recording has been made. You can add/delete chapter marker or hide unwanted scenes.

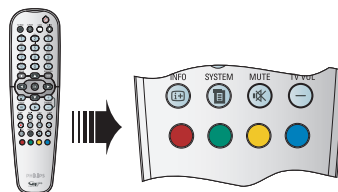


When you play back a recording in video edit mode, the entire recording will be played back including the hidden scenes.

- 1 Insert a recorded DVD into the recorder.
→ The Index Picture screen appears.
- 2 Otherwise, press **HDD-BROWSER** and select { **Disc Tray** } in the menu, then press ►.
- 3 Use ▲ ▼ keys to select a title and press **PLAY ►** to start playback.
- 3 Hold down **I◀◀ / ▶▶I** keys or use ◀ / ▶ keys on the remote control to search for the scene you want to edit, then press **PAUSE II**.
- 4 Press **EDIT** on the remote control.
→ The video editing menu appears.



- 5 Press the matching colour coded buttons on the remote control to access the options displayed at the bottom of the menu.



{ NO CHAPTER }

Red button – Select this to erase all the chapter markers in the current title.

{ CHAPTER }

Green button – Select this to access chapter editing menu.



{ MERGE }

Select this to merge the current chapter with the chapter before it.

Note: If the two chapters were hidden, then the joined chapter will also be hidden.

{ BACK }

Select this to return to the previous screen.

{ SPLIT }

Select this to insert a new chapter marker at the current point of playback. This will allow you to access a specific point in the recording easily or set a chapter you wish to hide.

{ HIDE } / { SHOW }

Select this to hide or show the current chapter. During playback, the hidden chapter will be skipped.

TIPS: No further recording and editing can be carried out on a finalised DVD±R.
Press **BACK** to go back to previous menu item. Press **EDIT** to exit the menu.

Edit Recordings - Recordable DVD (continued)

{ TITLE }

Yellow button – Select this to access title editing menu.



{ DIVIDE } - for DVD±RW only

Select this to create a new title from the current point of playback. The existing title will be divided into two titles.

Warning! Once a title has been divided, it cannot be reversed.

{ BACK }

Select this to return to the previous screen.

{ INDEX PIC }

Select this to use the current scene as the index picture.

Note: In the Index Picture screen, normally the first frame of a recording is shown as the title's index picture.

{ HIDE } / { SHOW }

Blue button – Select this to hide or show the current chapter.

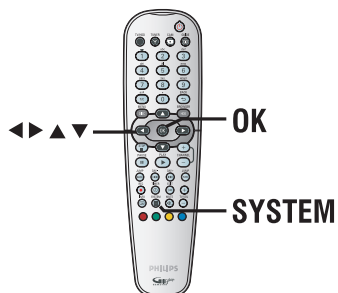
Helpful Hints:

- All the hidden chapters will be played back while in video editing mode.
- The selection of scenes to hide or show can only be done within a title.
- There is a limit on chapter markers that can be stored within a title and the hard disk drive.

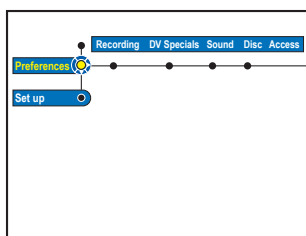
TIPS: No further recording and editing can be carried out on a finalised DVD±R.
Press **BACK** to go back to previous menu item. Press **EDIT** to exit the menu.

System Menu Options

Recorder Preferences



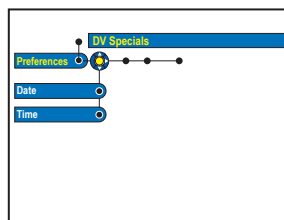
- 1 Press **SYSTEM** on the remote control.
→ The system setup menu appears.
- 2 Press ▼ to select { **Preferences** } and press ► repeatedly to view the available setup options, then press ▼ to access.



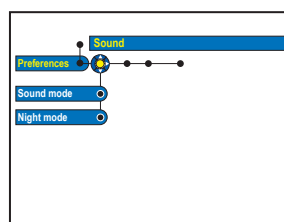
- 3 Select the setting you wish to change and press ►. Once you have changed the setting, press **OK** to confirm and back to the previous selected item.
→ Instructions and explanations of the options are provided in the following pages.
→ If the selection in the menu is greyed out, that means the feature is not available or cannot be changed in the current state.
- 4 To exit, press **SYSTEM**.

Note:

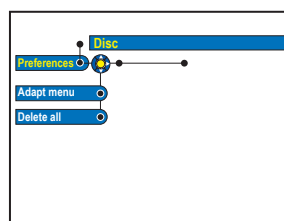
For { **Recording** }, see page 35.



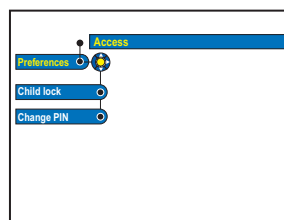
see page 73



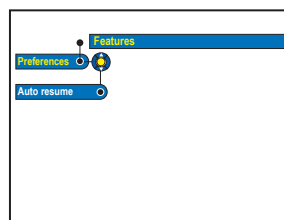
see page 73



see page 73



see page 74



see page 74

System Menu Options (continued)

DV Specials settings

Set the date and time for DV camcorder recording update functions. Once it has been set, the date and time will be updated automatically after a DV camcorder recording.

- Date** { 00 - 00 - 0000 } – Use ▲ ▼ keys to set the day, month and year, press ► to move to the next digit field. Once complete, press **OK**.
- Time** { 00 : 00 : 00 } – Use ▲ ▼ keys to set the hours, minutes and seconds, press ► to move to the next digit field. Once complete, press **OK**.

Sound settings (underlined options are the factory default settings)

- Sound mode** This setting is only required if you used the recorder's AUDIO OUT L/R sockets to connect other audio/video device.
- { Stereo } – Select this to hear the sound from the left and right audio channels. Use this setting when this recorder is connected to a TV or Stereo system.
 - { Surround } – Select this if the connected audio/video device is compatible with Dolby Surround. Dolby Digital and MPEG-2 multi-channel are mixed to a Dolby Surround compatible two-channel output signal.
- Night mode** This mode optimises playback of sound at low volume. High volume outputs will be softened and low volume outputs are brought upward to an audible level. This feature is only applicable for DVD video discs with Dolby Digital mode.
- { On } – Turns on night mode.
 - { Off } – Turns off night mode feature. Selects this to enjoy the surround sound with its full dynamic range.

Disc settings

- Adapt menu** If a DVD±RW has been recorded in a computer drive or in another recorder, the Picture Index screen may not be displayed correctly. This feature allows you to change the format of the disc to the 'Philips' type. Once you press **OK**, a message to confirm your action will appear on the TV.
- Delete all** Select this to delete all the recordings from the current recordable DVD. Once you press **OK**, a message to confirm your action will appear on the TV.

System Menu Options (continued)

Access settings (underlined options are the factory default settings)

You will be prompted to enter the four-digit pin code.

- When doing this for the first time, use the alphanumeric keypad 0-9 on the remote control to enter any four-digit pin code you prefer.
- If you forget your four-digit pin code, key in '1504'. Then enter any four-digit you prefer and enter the same pin code again to confirm it.

Childlock

With this feature, you can prevent children from viewing certain discs or the recorded titles in the HDD. When this feature is enabled, it will appear as { CHILDLOCK } at the bottom of the coloured options screen whenever you select a title in the content menu. You can press the **Yellow** button on the remote control to set the childlock on or off.

Note: This recorder can memorise settings for 50 discs.

- { On } – Turns on child lock function. A four-digit pin code must be entered in order to play the locked disc or title in the HDD.
- { Off } – All discs can be played.

Change PIN

Use the **alphanumeric keypad 0-9** to enter your new four-digit pin code. You must enter the same pin code again to confirm it. To cancel your change, press **▼** to select { **Cancel** } in the menu and press **OK** on the remote control.

Enter PIN of your choice
This will be used to access locked features.

PIN Code  ####
 Cancel

Features settings (underlined options are the factory default settings)

Auto resume

With this feature, you can resume playback of the disc from its last stopped point. This applies to the last 20 DVDs and Video CDs you played.

- { Off } – The disc will always start from the beginning when you load a disc or start playback.
- { On } – Turns on auto resume mode. When playback stopped, the content menu will appear. To resume playback, press **OK** while selecting the title in the menu.

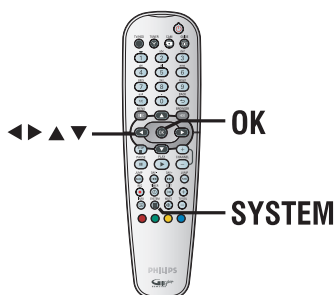
Note: Pressing **PLAY ►** will cancel the resume mode and start playback from the beginning of the disc.

System Menu Options (continued)

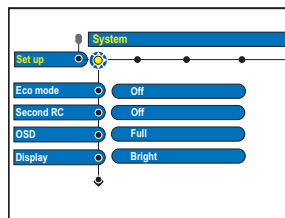
Recorder Setup

Before you start...

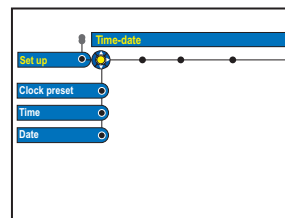
Mark the contents in the temporary HDD storage (time shift buffer) for which you wish to record to the HDD, see page 33. Otherwise, all the contents will be cleared when you access the { Setup } option.



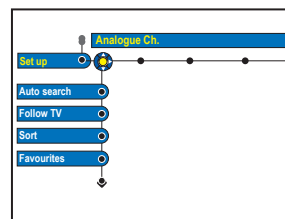
- 1 Press **SYSTEM** on the remote control.
→ The system setup menu appears.
 - 2 Press ▼ repeatedly to select { **Set up** } and press ►.
→ A warning message appears. Press **OK** to continue or select { **No** } in the menu to abort the operation.
→ Playback will pause.
-
- 3 Press ► repeatedly to view the available setup options, then press ▼ to access.
→ Instructions and explanations of the options are provided in the following pages.
→ If the selection in the menu is greyed out, that means the feature is not available or cannot be changed in the current state.
 - 4 To exit, press **SYSTEM**.



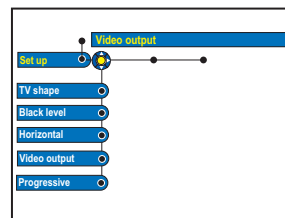
see page 76



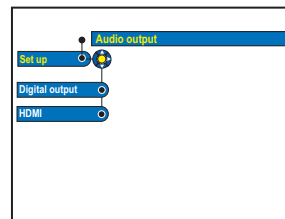
see page 77



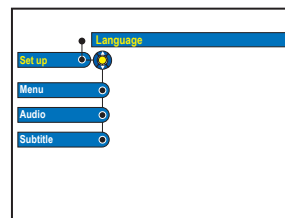
see page 78~79



see page 80



see page 81



see page 81

System Menu Options (continued)

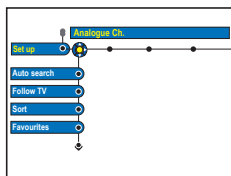
System settings (underlined options are the factory default settings)	
Eco mode	<p>This is an energy saving mode.</p> <p>{ On }</p> <ul style="list-style-type: none"> When you switch the recorder to standby mode, the display panel will turn blank to save power. <p>Note: When this mode is active, automatic SAT (satellite) recording is not possible.</p> <p>{ <u>Off</u> }</p> <ul style="list-style-type: none"> Clock will display on the recorder's display panel when switching off to standby mode.
Second RC	<p>{ On }</p> <ul style="list-style-type: none"> Enables control of this recorder with a second remote control (not supplied). <p>{ <u>Off</u> }</p> <ul style="list-style-type: none"> Disables second RC control function.
OSD	<p>Select the level of On-screen display information.</p> <p>{ <u>Full</u> }</p> <ul style="list-style-type: none"> Complete information is always displayed during use. <p>{ Reduced }</p> <ul style="list-style-type: none"> The help text and colour button bar will be removed from the display. <p>{ Normal }</p> <ul style="list-style-type: none"> The help-text will be removed from the menu.
Display	<p>Select the brightness of the recorder display panel.</p> <p>{ <u>Bright</u> }</p> <ul style="list-style-type: none"> Normal brightness. <p>{ Dimmed }</p> <ul style="list-style-type: none"> Medium brightness. <p>{ Off }</p> <ul style="list-style-type: none"> Turns off the display.
Jump forward	<p>Set the amount of time you want to skip ahead in tuner mode when you press the JUMP-FWD button on the remote control, press OK to confirm the setting. The maximum setting is 59 minutes and 59 seconds.</p>
Jump back	<p>Set the amount of time you want to skip backwards in tuner mode when you press the JUMP-BACK button on the remote control, press OK to confirm the setting. The maximum setting is 59 minutes and 59 seconds.</p>
PBC	<p>Play Back Control feature is only applicable for VCD/SVCD only. It allows you to play Video CDs (2.0) interactively, following the menu on the display.</p> <p>{ <u>Off</u> }</p> <ul style="list-style-type: none"> The VCD/SVCD will skip the index menu and playback directly from the beginning. <p>{ On }</p> <ul style="list-style-type: none"> The index menu (if available) will appear on the TV once you insert a VCD/SVCD. <p>Note: This option is not visible unless a VCD/SVCD is in the disc tray.</p>
Version Info	<p>This is only an information screen that shows the current version of software installed in your recorder. You may require this information for future online software upgrades.</p>

System Menu Options (continued)

Time-Date settings (underlined options are the factory default settings)	
Clock preset	<p>The time/date can be set automatically on this recorder if the stored TV channel transmits a time signal.</p> <ul style="list-style-type: none"> { <u>Auto</u> } – The recorder will automatically detect the first available channel which is transmitting the time/date information. { XXX }(preset number) – Select the TV channel to use for transmitting the time/date information. { Off } – Select this before setting the time/date manually.
Time	<p>If the time/date is incorrect, you must manually set the time/date here.</p> <ul style="list-style-type: none"> { 00 : 00 } – Use ▲ ▼ keys to set the hours and minutes, press ► to move to the next digit field. Once complete, press OK.
Date	<ul style="list-style-type: none"> { 31-01-2005 } – Use ▲ ▼ keys to set the day, month and year, press ► to move to the next digit field. Once complete, press OK.

System Menu Options (continued)

Analogue Channel settings



Although this recorder selects all the available analogue TV channels during basic installation, you may want to repeat the process later if more channels become available in your area or if you are reinstalling the recorder.

- ① Press **SYSTEM** on the remote control. Select { **Set up** } in the menu and press **►** repeatedly to select { **Analogue Ch.** }.
- ② Press **▼** repeatedly to select the following settings in the menu and press **►** to enter its options.

Auto search

Press **OK** on the remote control to start the automatic TV channel search process and replace all previously stored analogue TV channels. This process may take several minutes.

Follow TV

This feature is only available if you have connected this recorder to your TV using the EXT1 TO TV-I/O scart socket. It allows you to change the order of the TV channels stored in your recorder to match the order on the TV.

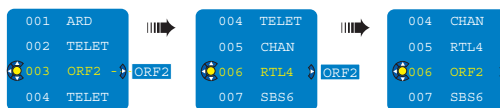
- 1) Press **OK** to confirm the message on the TV, 'TV 01' will appear on the display panel. Use the **TV's remote control** to select programme number {1} at your TV, then press **OK** on the recorder's remote control.
 - If the recorder finds the same TV channel as on the TV, it stores it as 'P01'. 'TV 02' will then appear on the display panel.
 - If no video signal is received from the TV, 'NO TV' will appear.
- 2) Use the **TV's remote control** to select programme number {2} at your TV, then press **OK** on the recorder's remote control.

Repeat the above steps until you have assigned all the TV channels.

Note: Pressing **BACK** will interrupt the follow TV process.

Sort

According to your preference, you can change the order of the stored TV channels.



- 1) Use **▲ ▼** keys to select the TV channel that you want to move and press **OK** to confirm.
- 2) Use **▲ ▼** keys to shift the TV channel to the desired position and press **OK** to place the TV channel at the current position.

Favourites

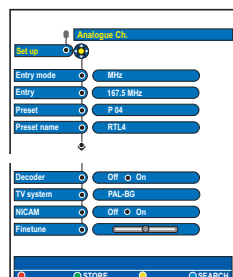


Press **OK** to mark your favourite TV channels for quick access by using the channel up/down button on the remote control.

- ☒ The TV channels can be accessed using the **CHANNEL + -** on the remote control.
- ☐ The TV channels can only be accessed by pressing the corresponding number button on the remote control.

System Menu Options (continued)

Analogue Channel settings - Manual Search



In some cases, not all of the available TV channels may have been found and stored during basic installation. In this case, you will need to search for and store the missing or coded TV channels manually.

- 1 Press **SYSTEM** on the remote control. Select { **Set up** } in the menu and press **▶** repeatedly to select { **Analogue Ch.** }.
- 2 Press **▼** repeatedly to select the following settings in the menu and press **▶** to enter its options.

Entry Mode

Select manual search based on channel allocation or frequency entry { **Channel**, **S. Channel** (Special channel), **MHz** (frequency) }.

Note: S. Channel refers to specified hyperband channels.

Entry

- Use the **alphanumeric keypad 0-9** to enter the frequency/channel number, press **OK** and the **Green** button for { **STORE** }.
- OR
- Press the **Blue** button on the remote control for { **SEARCH** }, once you have found the correct frequency/channel, press the **Green** button for { **STORE** }.

Preset

Use the **alphanumeric keypad 0-9** to enter the preset channel number for the channel to store (e.g., '01'), press **OK** and the **Green** button for { **STORE** }.

Preset name

Use the **alphanumeric keypad 0-9** to enter the preset channel name, press **OK** and the **Green** button for { **STORE** }.

All channels can have a name of up to four characters.

Decoder

If the current TV channel is transmitted by coded TV signals that can only be viewed properly with a decoder which is connected to the EXT2 AUX-I/O socket, you need to activate the connected decoder.

- { **On** }
 - Select this to allocate the connected decoder to this TV channel.
- { **Off** }
 - Turns off the decoder feature.

TV system

Set the TV system that produces the least distortion of picture and sound. See "TV System Guide" for more information.

NICAM

NICAM is a digital sound transmission system. It can transmit either one stereo channel or two separate mono channels.

- { **On** }
 - Improves the sound transmission of the TV channel.
- { **Off** }
 - Select this if the reception is poor and the sound is distorted.

Finetune

Select this to fine-tune the TV channel manually if the reception is poor. Use **◀▶** keys to adjust the frequency and press **OK** to confirm.

System Menu Options (continued)

Video settings (underlined options are the factory default settings)

TV Shape

The picture shape can be adjusted to fit your TV.

- { **4:3 Letterbox** } – For a 'wide-screen' display with black bars on the top and bottom.
- { **4:3 PanScan** } – For a full-height picture with the sides trimmed.
- { **16:9** } – For wide-screen TV (frame ratio 16:9).

Black Level

Adapts the colour dynamic for NTSC disc.

- { **Normal** } – Normal colour contrast.
- { **Enhanced** } – Improves the colour contrast and brightens the picture of an NTSC-compatible DVD.

Horizontal

Use ◀ ▶ keys to adjust the horizontal position of the picture on your TV screen, press **OK** to confirm the setting.

Video Output

Chooses the type of video output that matches the video connection between this recorder and your TV.

- { **RGB•CVBS** } – For RGB or CVBS connection.
- { **S-Video** } – For S-Video connection.
- { **Automatic** } – The output setting will automatically follow the video signal received.

Progressive

Before enabling the progressive scan feature, you must ensure that your TV can accept progressive signals (a progressive scan TV is required) and you have connected the recorder to your TV using the Y Pb Pr (see page 17).

- { **On** } – Turns on progressive scan mode.
- { **Off** } – Disables the progressive scan mode.

Note: The progressive video output will be disabled if the HDMI output is turned on.

Video settings for HDMI connection only

HDMI

This feature is only applicable for HDMI connection (see page 17).

- { **Auto** } – Turns on the HDMI output. The video output resolution will automatically follow the video signal received.
- { **On** } – Turns on the HDMI output. The video output resolution will follow the setting at { Video upscaling }.

Video upscaling

Set the video resolution depending on the capability of the connected TV/device (**480p, 576p, 720p, 1080i**). 'i' denotes interlace and 'p' denotes progressive.

Note: This setting is not available if the HDMI setting is set to { Auto }. Changing the video upscaling will normally cause the TV to blank out for a few seconds as it adjusts to the new setting. Resolutions not supported by the television will be greyed out.

HDMI output

This setting determines the video output colour format.

- { **RGB** } – Gives brighter colours and a deeper black.
- { **YPbPr** } – Provides a very fine shade of colour. This is the standard setting for HDMI compatible devices.

System Menu Options (continued)

Audio Output settings (underlined options are the factory default settings)

Digital output

This setting is only required if you are using the recorder's COAXIAL/ OPTICAL OUT socket to connect other audio/video device.

- { All } – Select this if the connected device has a built-in Multi- Channel decoder that supports one of the multi-channel audio format (Dolby Digital, MPEG-2).
- { PCM } – Select this if the connected device is not capable of decoding multi-channel audio. The system will convert the Dolby Digital and MPEG-2 multi-channel signals to PCM (Pulse Code Modulation).
- { Off } – Select this to deactivate the digital audio output. For example, if you use the AUDIO OUT sockets to connect this recorder to a TV or Stereo system.

HDMI

This setting is only required if you are using the recorder's HDMI OUT socket to connect your TV or other display device.

- { Auto } – Select this if you want to enjoy the multi-channel audio output through your HDMI connection.
- { Disable } – Select this if the connected device is not able to output the sound through the HDMI connection or the playback audio format is not supported by HDMI connection (e.g. projector, SACD).

Note: Make sure that you have alternative audio connection from the recorder to your TV or the display device for the sound output (see page 18).

Helpful Hint:

- It is not possible to listen to SACDs or copy-controlled DVD-Audio CPPM (Content Protection for Playable Media) sources using the HDMI connection.

Language settings

Menu

Select the menu language for this recorder's on-screen display. This setting will be taken from the basic installation.

Audio

Select the preferred audio language for DVD playback.

Subtitle

Select the preferred subtitle language for DVD playback.

Helpful Hints:

- If the selected audio/subtitle language is not available on the disc, the disc's default language will be used instead.
- For some DVDs, the subtitle/audio language can only be changed via the DVD disc menu.

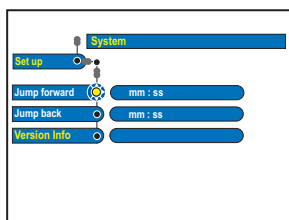
Software Upgrade

Installing the latest software

Periodically Philips will issue software upgrades to enhance your user experience.

IMPORTANT!

Power supply must not be interrupted during upgrade!



- 1 Get the version information of this recorder by pressing **SYSTEM** on the remote control and select { **Set up** } > { **System** } > { **Version Info** } in the menu.
→ Write down the information for your current software version.
- 2 Visit the Philips website 'www.philips.com/support' to check the availability of the latest software upgrade. Download the software to a CD-R.
- 3 Press **OPEN CLOSE ▲** on the front of the recorder to open the disc tray.
- 4 Insert the CD-R and press **OPEN CLOSE ▲** again.
→ The software will start to install on the recorder automatically.

General Information

Setting up Progressive Scan feature

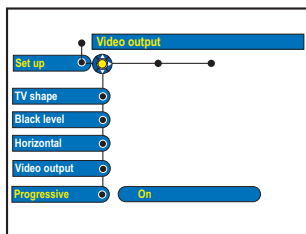
(for Progressive Scan TV only)

The progressive scan displays twice the number of frames per second than interlaced scanning (ordinary normal TV system). With nearly double the number of lines, progressive scan offers higher picture resolution and quality.

Before you start...

- Ensure that you have connected this recorder to a progressive scan TV using the Y Pb Pr connection (see page 17).
- Ensure that you have completed the basic installation and set-up.

- 1 Turn on the TV to the correct programme number for the recorder (e.g. 'EXT', '0', 'AV').
- 2 Turn on the recorder and press **SYSTEM** on the remote control.
→ The system setup menu appears.
- 3 Press ▼ to select { **Set up** } and press ► to select { **Video output** }.
→ A warning message appears. Press **OK** to continue.



- 4 Press ▼ to highlight { **Progressive** } and press ► to access. Press ▼ to select { **On** }.

- 5 Read the instructions on the TV and confirm your action by pressing **OK**.
→ The setup is now completed and you can start to enjoy the high quality picture.
- Otherwise, select { **Cancel** } and press **OK** to go back to the previous menu.
- 6 To exit the menu, press **SYSTEM**.

If no picture:

- 1 Disconnect the recorder's ~MAINS from the power supply.
- 2 Hold down **◀◀** on the recorder whilst reconnecting its ~MAINS to the power supply.

Helpful Hints:

- There are some progressive scan TVs and High-Definition TVs that are not fully compatible with this unit, resulting in an unnatural picture when playing back a DVD VIDEO disc in the progressive scan mode. In such a case, turn off the progressive scan feature on both the recorder and your TV.
- If the HDMI video output is turned on, the progressive output signal will change to interlace.

Copyright notice

The making of unauthorised copies of copy-protected material, including computer programmes, files, broadcasts and sound recordings, may be infringement of copyrights and constitute a criminal offence. This equipment should not be used for such purposes.

Frequently Asked Questions

What kind of disc should I use for recording?

You can only record on DVD±R, DVD±RW or DVD+R DL discs. DVD±R/±RW is the most compatible recordable DVD format in the market today. They are fully compatible with most of the existing DVD-Video players and DVD-ROM drives in computers.

What is the capacity of a DVD±R and DVD±RW?

4.7GB, or equivalent to six CDs. You can store only one hour of recording on a single disc at the highest quality (DVD standard) and about 8 hours recording at the lowest quality (VHS standard). The recording mode indicates the number of hours that will fit on a single disc.

What is the difference between DVD±R and DVD±RW?

DVD±R is "recordable" and DVD±RW is "erasable" and "rewritable". With a DVD±R, you can record multiple sessions on the same disc. But when the disc is full, you cannot record any more on the disc. The DVD±RW allows you to record over the same disc repeatedly.

What is DV IN socket?

Using DV, also known as i.LINK, you can connect a DV-equipped camcorder to this recorder using a single DV cable for input and output of audio, video, data and control signals.

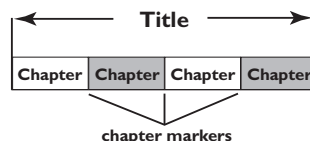
- This recorder is only compatible with DV-format (DVC-SD) camcorders. Digital satellite tuners and Digital VHS video recorders are not compatible.
- You cannot connect more than one DV camcorder at a time to this recorder.
- You cannot control this recorder from external equipment connected via the DV IN socket.
- It is not possible to record the contents from this recorder to your DV camcorder via the DV IN socket.

Can I copy a VHS tape or DVD from an external player?

Yes, but only if the VHS tape or DVD is not copy protected.

What are Titles and Chapters?

A DVD disc contains Titles and Chapters, which are similar to the Titles and Chapters of a book. A Title is often a complete movie and is broken down into Chapters, or individual scenes from the movies.



Programmes are recorded as a single title. They may consist of one chapter or a few chapters within a title, depending on the recording settings.

How do I set up Titles and Chapters?

The recorder will automatically create a new Title every time you start a new recording. You can then add Chapters to these recordings manually or have them automatically inserted at a specific intervals.

What does "finalising" a disc do?

Finalising a disc locks the disc so it can no longer be recorded. This is only required for DVD±R. It will then be compatible with virtually any DVD player. To remove a disc without finalising it, simply stop recording and eject the disc. You will still be able to record on the disc if there is storage space for more recordings.

Frequently Asked Questions (continued)

How good is the quality of the recording?

There are a few picture quality levels to choose from, ranging from “HQ” (1 hour recording at high quality) to “SEP” (8 hours recording at VHS quality) on a recordable DVD.

Record Mode	Hours of recordings can be stored on the L-HDD or an empty DVD recordable disc.		
	HDD (250 GB)	DVD±R/DVD±RW	DVD±R L Double Layer
HQ (high quality)	47	1	1 hr 55 mins
SP (standard play)	95	2	3 hrs 40 mins
SPP (standard play plus)	119	2.5	4 hrs 35 mins
LP (long play)	143	3	5 hrs 30 mins
EP (extended play)	191	4	7 hrs 20 mins
SLP (super long play)	287	6	11 hrs 5 mins
SEP (super extended play)	400	8	14 hrs 45 mins

What is HDMI?

High-Definition Multimedia Interface (HDMI) is a high-speed digital interface that can transmit uncompressed high definition video and digital multichannel audio. It delivers perfect picture and sound quality, completely free from noise. HDMI is fully backward-compatible with DVI.

As required by the HDMI standard, connecting to HDMI or DVI products without HDCP (High-bandwidth Digital Content Protection) will result in no Video or Audio output.

What is video upscaling?

With Video Upscaling you can increase the resolution of the DVD video signals from SD (Standard Definition) to HD (High Definition). The High Definition output can only be fed through the HDMI connections.



This recorder allows you to increase the picture resolution up to 720p and 1080i. Before adjusting the setting, make sure that your television is able to support the video resolution or standard.

Troubleshooting

WARNING!

Under no circumstances should you try to repair the system yourself, as this will invalidate the warranty. Do not open the system as there is a risk of electric shock.

If a fault occurs, first check the points listed below before taking the system for repair. If you are unable to remedy a problem by following these hints, consult your dealer or Philips for help.

Problem (General)	Solution
No power.	<ul style="list-style-type: none"> – Press the STANDBY-ON button on the front of the recorder to turn on the system. – Make sure the AC outlet has power.
The message “IS THE TV ON?” appears on the display panel.	<ul style="list-style-type: none"> – This recorder will not operate until you complete the first installation. Read chapter “Step 3: Installation and Set-up” for details.
The buttons on the recorder do not work.	<ul style="list-style-type: none"> – There is a technical problem. Disconnect the recorder from the power outlet for 30 seconds, then connect again. If the recorder still will not operate, then reset it to the default factory settings : <ol style="list-style-type: none"> 1) Disconnect the recorder from the power outlet. 2) Hold down STANDBY-ON button on the front of the recorder while reconnecting to the power outlet. 3) Release STANDBY-ON button when “STARTING” appears on the display. 4) Wait until the recorder’s demo start scrolling on the display, press STANDBY-ON again to turn on the recorder. All the information stored in the memory (programmes, time) will be cleared. The first basic installation menu will be displayed on the TV.
Remote control does not work.	<ul style="list-style-type: none"> – Aim the remote control directly at the sensor on the front of this recorder (not towards TV). If the recorder receives a signal from the remote control, the icon  will appear on the display. – Remove any obstacles between this recorder and the remote control. – Batteries are weak, replace the batteries.
No picture.	<ul style="list-style-type: none"> – Turn on your TV and set to the correct Video In channel for the recorder. You may go to Channel 1 on your TV, then press the channel down button on your TV’s remote control until you see the TV programme. – Check the video connection between this recorder and the TV. – It may be due to the recorder’s video output setting not being matched to the video connection. You can reset the recorder as below : <ol style="list-style-type: none"> 1) Disconnect the recorder’s ~MAINS from the power supply. 2) Hold down  on the recorder whilst reconnecting its ~MAINS to the power supply.

Troubleshooting (continued)

Problem (General)	Solution
No sound.	<ul style="list-style-type: none"> – Check the recorder audio connection. Read chapter “Basic Recorder Connections - Connecting the audio cables” for details. – Set the Analogue output or Digital output correctly, based on the device you have connected to this recorder. Read chapter “System Menu Options - Audio Output settings” for details.
No TV signal received from the recorder.	<ul style="list-style-type: none"> – Have your aerial or cable TV signal checked. – Install the TV channel. Read chapter “System Menu Options - Analogue Channel settings - Auto Search” for details.
The message ‘Disc contains unknown data’ appears.	<ul style="list-style-type: none"> – This message may appear if you insert a disc that was not finalised or contains junk data. DVD±Rs that have not been finalised are very sensitive to fingerprints, dust, or dirt. This may cause problems during recording. To use the disc again, do the following : <ol style="list-style-type: none"> 1) Make sure that the surface of the disc is clean. 2) Press OPEN/CLOSE on this recorder to open the disc tray. 3) Insert the disc but do not close the tray. 4) Hold down button number {5} on the remote control until the tray closes. This recorder will start the repair process. 5) If the disc is recovered, the Picture Index screen will appear.
The message ‘NO SIGNAL’ appears.	<ul style="list-style-type: none"> – Check that the cable is plugged in firmly. – If a recording is made from a video recorder, change the tracking on the video recorder. – This recorder may not be able to recognise the video input signal if this signal is poor or does not comply with relevant standards.
‘X’ appears at the bottom of the TV screen.	<ul style="list-style-type: none"> – No aerial signal received for the current channel or no video signal received from the external input channel (EXT1, EXT2, CAM1 or CAM2). – Check the antenna connection. – Check the connection and turn on the connected device.
The message ‘Insert recordable disc’ appears.	<ul style="list-style-type: none"> – Either no disc was inserted or the disc that was inserted cannot be used for recordings. Insert a recordable DVD (DVD±R, DVD±RW, or DVD+R Double Layer).
The message ‘Collision’ appears.	<ul style="list-style-type: none"> – The timer recording overlaps with another timer recording. – If you ignore this warning, the programmed recording with the earlier start time will start first. – Change the information for one of the two recordings. – Delete one of the two recordings.

Troubleshooting (continued)

Problem (Playback)	Solution
Disc will not play.	<ul style="list-style-type: none"> – Insert the disc with the label facing up. – The child lock is on. Read chapter “System Menu Options - Access settings - Child lock” for details. – Wrong region code. The DVD must be coded for ALL regions or Region 2 in order to play on this recorder. – There is no recording on the disc or wrong disc type. Read chapter “Playback from Disc - Playable discs” for details. – Make sure the disc is not scratched or warped. Clean the disc or use a new one. – Check if the disc is defective by trying another disc.
The picture is distorted or black and white during playback.	<ul style="list-style-type: none"> – The disc does not match with the TV colour system standard (PAL/NTSC). – The disc is dirty. Clean the disc. – Sometimes a small amount of picture distortion may appear. This is not a malfunction.
There is picture or sound interference with the TV reception.	<ul style="list-style-type: none"> – Have your aerial or cable TV signal checked. – Fine-tune your TV channel. Read chapter System Menu Options - Analogue Channel settings - Fine Tuning” for details.
Distorted sound coming from a connected hi-fi amplifier.	<ul style="list-style-type: none"> – Do not connect any cables from this recorder to the ‘Phono’ input of your amplifier. – If you are playing a DTS CD, you must use the COAXIAL or OPTICAL-DIGITAL AUDIO OUTPUT socket of this recorder to connect to the Hi-Fi system or amplifier. If the Hi-Fi system or amplifier does not support DTS, distorted sound might be occurred.
The recorded DVD cannot be played back on another DVD player.	<ul style="list-style-type: none"> – If a recording is too short, it is possible that a DVD player cannot detect it. Observe the following ‘minimum recording times’. Recording mode : {HQ} – 5 minutes, {SP} – 10 minutes, {SPP} – 13 minutes, {LP} – 15 minutes, {EP} – 20 minutes, {SLP} – 30 minutes, {SEP} – 30 minutes. – Some DVD players cannot play back DVD±RW recordings. You can solve this problem by using a special function : <ol style="list-style-type: none"> 1) Press OPEN/CLOSE on this recorder to open the disc tray. 2) Insert the disc but do not close the tray. 3) Hold down the number button {2} on the remote control until the tray closes. The disc is modified. 4) If this fails to produce the desired result, repeat the procedure using the number button {3} on the remote control. 5) You can restore the disc to its original condition by pressing and holding number button {1}.

Troubleshooting (continued)

Problem (Recording)	Solution
Recordings are not occurring as scheduled. New recordings cannot be made.	<ul style="list-style-type: none"> – The TV channel you want to record is not stored or you selected the wrong programme number. Check the TV channels stored. – You must reset the timer recording after adjusting the clock setting. – You cannot use the recorder to duplicate copyright material (DVDs or videotapes) onto a recordable DVD, "COPY PROT" will be displayed.
The wrong TV channel was decoded (recorded) after you programmed a recording using the ShowView / VIDEO Plus+ system.	<ul style="list-style-type: none"> – 'VPS/PDC' is turned on but 'VPS/PDC time' is wrong. Enter the exact 'VPS/PDC time'. <ol style="list-style-type: none"> 1) Enter the ShowView / VIDEO Plus+ PlusCode programming number of the desired TV channel. 2) Press OK to confirm. 3) Check the channel number in the {Ch.} input field. If this does not correspond to the desired TV channel, select this entry field and change the channel number. 4) Press OK to confirm.
The index screen flickers when a DVD±R is inserted.	<ul style="list-style-type: none"> – You can finalise the disc using the following function: <ol style="list-style-type: none"> 1) Press OPEN CLOSE on this recorder to open the disc tray. 2) Insert the disc but do not close the tray. 3) Hold down button number {4} on the remote control until the tray closes. 'FINALISING' appears on the display panel. 4) If finalising has been successful, the Picture Index screen will appear.
Picture is fuzzy and brightness varies when played back your recording.	<ul style="list-style-type: none"> – This happens if you try to copy DVDs or video tapes that have been copy-protected. Even though the picture on the TV is fine, the recording on the recordable DVD is faulty. This interference is unavoidable with copy-protected DVDs or video tapes. – The recordable DVD has a limited recording lifetime, use a new disc for recording.
The DVD+RW/-RW cannot be used for recording on this recorder. Even though it has been formatted using the PC drive.	<ul style="list-style-type: none"> – You have to re-format the DVD+RW/-RW. <ol style="list-style-type: none"> 1) Press OPEN CLOSE on this recorder to open the disc tray. 2) Insert the disc but do not close the tray. 3) Hold down button number {0} on the remote control until the disc tray closes. 4) Start recording on the DVD+RW/-RW before you remove it from the disc tray.

Troubleshooting (continued)

Problem (HDMI)	Solution
No audio output from HDMI connection.	<ul style="list-style-type: none"> – You will not hear any sound from the HDMI output if the source device is only DVI/HDCP (High-bandwidth Digital Content Protection)-compatible. – It is not possible to output SACD or copy-controlled DVD-Audio sources from the HDMI connection. – When the HDMI on this recorder is used to connect to a TV, it can be no digital audio/surround sound on Coaxial/Optical output, depending on the TV's audio capabilities. Press SETUP on the remote control, go to Audio Output setting and set the HDMI to { Disable }.
No video output from HDMI connection.	<ul style="list-style-type: none"> – Make sure that you have activated this recorder as the HDMI input in the settings for the device you are using. See HDMI setting. – HDMI connection can only be made to HDMI-equipped devices with HDCP (High Bandwidth Digital Content Protection). If you wish to connect to a DVI connector (equipped with HDCP), you will need a separate adaptor (DVI to HDMI). – Make sure the resolution of this recorder matches the device you have connected using the HDMI. See HDMI setting. – Check if the HDMI cable is faulty. If there is not signal received from the HDMI connection, the { Video Upscaling } and { HDMI output } options in the system menu video output settings will be greyed out. Replace a new HDMI cable. – When connecting to a non-HDCP compliant TV, the HDCP warning message will appear only on the analogue video output. – When the HDMI and component video are used to connect to a TV at the same time, it can be no picture output from the component video connection. Disconnect the HDMI cable.
EPG (GUIDE Plus+) data is not available.	<ul style="list-style-type: none"> – Turn off the recorder to standby mode for at least 24 hours. It will enable downloading of TV listings data. If the recorder is connected to a cable box/satellite receiver, make sure that it is switched to the host channel during that 24 hours. – Make sure that no timer recording is programmed during this timing, as it will interrupt the EPG downloading.

Specifications

Disc types

- Recording : DVD+R/-R DVD+R Double layer, DVD+RW/-RW
- Playing: DVD-Video, MP3-CD, CD-R/CD-RW, Video CD/SVCD, DVD+R/+RW, DVD-R/-RW, Picture CD, Audio CD

Picture/Display

- D/A Converter: 10 bit, 54 MHz
- A/D Converter: 9 bit, 27 MHz
- Picture enhancement: Progressive Scan, Pixelplus link

Sound

- D/A Converter: 24 bit, 96 kHz
- A/D Converter: 24 bit, 96 kHz

Video Recording

- Recording system: PAL
- Compression formats: MPEG2, MPEG1
- Audio compression: Dolby Digital 2.0

Video Playback

- Compression formats: MPEG2, MPEG1
- Video disc playback system: NTSC, PAL

Audio Playback

- Compression formats: Dolby Digital, MP3, MPEG2 Multichannel, MPEG1, PCM
- MP3 bit rates: 32-256 kbps and VBR

Storage Media

- Hard Disk capacity: 250 GB
- HDD recording enhancement: Time Shift Buffer, Instant Replay

Tuner/Reception/Transmission

- TV system: PAL, SECAM
- Aerial input: 75 Ohm coaxial (IEC75)

Connectivity

- Rear Connections
 - RF antenna in
 - RF TV out
 - Scart 1 (CVBS, S-Video/RGB out)
 - Scart 2 (CVBS, S-Video/RGB in)
 - Component Video out Progressive
 - S-Video out
 - Video out (CVBS)
 - Audio left/right out
 - Digital audio out (coaxial)
 - Optical out
 - G-LINK (part of GUIDE Plus+)
 - HDMI out
 - Mains
- Front Connections
 - DV-input (i.LINK)
 - S-Video in
 - Video in
 - Audio left/right in

Convenience

- Programming/Timer enhancement:
 - Automatic Satellite recording
 - Mon~Fri/weekly repeat programme
 - Manual timer
 - One Touch Recording
 - VPS/PDC recording control
 - ShowView / VIDEO Plus+
 - IR Set-Top-Box control
- Programmable events: 25
- Disc Library: Up to 9000 titles and 999 discs
- Child protection: Child Lock
- Clock: Smart Clock
- Digital Content Management: Digital Photo Manager
- Ease of installation: Follow TV, Auto install
- Electronic programming guide: GUIDE Plus+

Power

- Power supply: 220-240V, ~50 Hz
- Power consumption: 35 W
- Standby power consumption: 3 W


Cabinet


- Dimensions (WxHxD): 435 x 76 x 335 mm
- Net Weight: 5 kg


Specification and design are subject to change without notice.


Display panel symbols/messages


The following symbols/messages may appear on your recorder display:



- 00:00
Multifunction display/text line
 - Title/track number
 - Total/elapsed/remaining title/track time
 - Disc/title name
 - Error or warning messages
 - Additional information regarding the disc
 - TV channel number or source of video
 - Clock (This is displayed in Standby mode).
 - TV programme title
- 

Tuner is selected as visible source.
- 

Camara mode is the current active source.
- 

Disc is the current active source.
- 

Hard disk is the current active source.
- TV
Modulator is turned off. The antenna signal (RF signal) is only connected to the TV when the modulator is turned off.
- 

Remote control command for the recorder has been received.
-  **TIMER**
A timer recording has been programmed or is active.
-  **SAT**
The recorder is prepared for satellite recording.
- **BLOCKED**
The disc tray cannot be opened or closed due to some mechanical obstruction.
- **CLOSING**
Disc tray is closing.
- **COMPATIBLE**
The recorder is busy making changes to make the disc DVD-compatible.
- **COPY PROT**
The DVD/video cassette you are trying to copy is copy-protected.
- **CREATE MENU**
After the first recording has been successfully complete on a new disc, the menu structure is created.
- **DISC ERR**
An error occurred when writing the title. If this happens often, clean the disc or use a new one.
- **DISC FULL**
Disc is full. There is no storage space for new recordings.
- **DISC UPDATE**
 - Updating of disc is done after the editing is complete.
 - Entire disc is being erased.
- **DISC WARN**
An error occurred when writing the title. The recording will continue, but the error will be skipped.
- **EMPTY DISC**
Inserted disc is new or has been completely erased (no recordings present).
- **EMPTY TITLE**
An empty title was selected.
- **EPG DOWNLOAD**
Downloading of TV listing data is in progress.
- **FINALISE**
The DVD±R disc is being finalised. The progress bar on the LED shows the status of the finalisation process.
- **INFO DVD**
Information on the inserted DVD is displayed on the TV.

Display panel symbols/messages (continued)

- **INSTALL**
After the automatic channel search, the menu for setting the time/date appears on the TV.
- **IS THE TV ON**
The recorder is currently in the first installation mode. Turn on your TV and read the chapter 'Installation and Set-up' in the user manual.
- **MAX CHAP**
The maximum number of chapters per title disc has been reached. The maximum number of chapters per title is 99, and 255 per disc.
- **MAX TITLE**
The maximum number of titles has been reached for the disc. Each disc can have a maximum of 49 titles.
- **MENU UPDATE**
After a successful recording, the list of disc contents is updated.
- **NO DISC**
No disc has been inserted. If a disc has been inserted, then it is possible that the disc cannot be read.
- **NO SIGNAL**
No signal or poor signal strength.
- **NTSC DISC**
A disc with NTSC recordings has been inserted and an attempt was made to record a PAL signal. Insert a new disc or use a disc containing PAL recordings.
- **OPENING**
Disc tray is opening.
- **PAL DISC**
A disc with PAL recordings has been inserted and an attempt was made to record an NTSC signal. Insert a new disc or use a disc containing NTSC recordings.
- **PHILIPS**
The recorder has been turned on.
- **PHOTO MMM/NNN**
Number of the current photo (for Photo mode). MMM represents the order of the current photo, NNN represents the total number of photos in the album. If the number exceeds 999, '999' will be displayed instead.
- **POST FORMAT**
The disc is being prepared after the menu structure has been created.
- **PROTECTED**
Title is copy-protected and cannot be recorded.
- **PROGRESSIVE SCAN**
The video output is in progressive scan quality.
- **READING**
Disc is being recognised by the recorder.
- **RECORDING**
A recording is currently in progress.
- **STANDBY**
The recorder has been turned off.
- **SYS MENU**
The on-screen menu display is on.
- **VCD**
A VCD has been loaded into the recorder.
- **BUSY**
Wait until this message disappears. The recorder is busy processing an operation.

Glossary

Analogue: Sound that has not been turned into numbers. Analogue sound varies, while digital sound has specific numerical values. These sockets send audio through two channels, the left and right.

Aspect ratio: The ratio of vertical and horizontal sizes of a displayed image. The horizontal vs. vertical ratio of conventional TVs is 4:3, and that of wide-screens is 16:9.

AUDIO OUT sockets: Red and white sockets on the back of the system that send audio to another system (TV, Stereo, etc.).

Chapter: Sections of a picture or a music piece on a DVD that are smaller than titles. A title is composed of several chapters. Each chapter is assigned a chapter number enabling you to locate the chapter you want.

Digital: Sound that has been converted into numerical values. Digital sound is available when you use the DIGITAL AUDIO OUT COAXIAL or OPTICAL sockets. These sockets send audio through multiple channels, instead of just two channels as analogue does.

Disc menu: A screen display prepared for allowing selection of images, sounds, subtitles, multi-angles, etc recorded on a DVD.

Dolby Digital: A surround sound system developed by Dolby Laboratories containing up to six channels of digital audio (front left and right, surround left and right, centre and subwoofer).

Finalise: A process that makes playback of a recorded DVD±R or CD-R possible on device that can play such media. You can finalise DVD±R on this unit. After finalising, the disc becomes play only and you can no longer record or edit on the disc.

Index Picture Screen: A screen that gives an overview of a DVD±RW or DVD±R. An Index Picture represents each recording.

HDD (Hard disk drive): This is a mass data storage device used in computers, etc. Disks are flat, circular, rigid plates coated with a thin magnetic media. Magnetic heads record data on the rapidly spinning disks. This facilitates the reading and writing of large amounts of data at high speed.

JPEG: A very common digital still picture format. A still-picture data compression system proposed by the Joint Photographic Expert Group, which features small decrease in image quality in spite of its high compression ratio.

MP3: A file format with a sound data compression system. "MP3" is the abbreviation of Motion Picture Experts Group 1 (or MPEG-1) Audio Layer 3. By using the MP3 format, one CD-R or CD-RW can contain about 10 times more data than a regular CD.

MPEG: Motion Picture Experts Group. A collection of compression systems for digital audio and video.

PBC: Playback Control. Refers to the signal recorded on video CDs or SVCDs for controlling playback. By using menu screens recorded on a Video CD or SVCD that supports PBC, you can enjoy interactive playback and searching.

PCM: Pulse Code Modulation. A digital audio encoding system.

Progressive Scan: The progressive scan displays twice the number of frames per seconds than ordinary TV system. It offers higher picture resolution and quality.

Region code: A system allowing discs to be played only in the region designated. This unit will only play discs that have compatible region codes. You can find the region code of your unit by looking on the product label. Some discs are compatible with more than one region (or ALL regions).

S-Video: Produces a clear picture by sending separate signals for the luminance and the colour. You can use S-Video only if your TV has an S-Video In socket.

Title: The longest section of a movie or music feature on DVD. Each title is assigned a title number, enabling you to locate the title you want.

VIDEO OUT socket: Yellow socket on the back of the system that sends the DVD picture video to a TV.

English

TV System Guide

COUNTRY	VHF	UHF	DVD REGIONS
AFGHANISTAN	PAL/SECAM B		5
ALBANIA	PAL B	PAL G	2
ALGERIA	PAL B	PAL G	5
ANGOLA	PAL I		5
ARGENTINA	PAL N	PAL N	4
AUSTRALIA	PAL B	PAL H	4
AUSTRIA	PAL B	PAL G	2
AZORES	PAL B		
BAHAMAS	NTSC M		4
BAHRAIN	PAL B	PAL G	2
BANGLADESH	PAL B		5
BARBADOS	NTSC M		4
BELGIUM	PAL B	PAL H	2
BERMUDA	NTSC M		
BOLIVIA	NTSC M	NTSC M	4
BOTSWANA	PAL I		5
BRAZIL	PAL M	PAL M	4
BRUNEI	PAL B	PAL B	
BULGARIA	PAL B	PAL G	2
BURKINA FASO	SECAM K1		5
BURMA	NTSC M		
BURUNDI	SECAM K1		5
CAMBODIA	NTSC M		3
CAMEROON	PAL B	PAL G	5
CANADA	NTSC M	NTSC M	1
CANARY ISLANDS	PAL B		2
CHAD	SECAM K1		5
CHILE	NTSC M	NTSC M	4
CHINA	PAL D		6
COLOMBIA	NTSC M	NTSC M	4
COSTA RICA	NTSC M	NTSC M	4
CROATIA	PAL B	PAL G	2
CUBA	NTSC M	NTSC M	4
CYPRUS	PAL B	PAL G	
CZECH REPUBLIC	PAL D	PAL K	2
DAHOMEY	SECAM K1		
DENMARK	PAL B	PAL G	2
DJIBOUTI	SECAM B	SECAM G	5
DOMINICAN REP	NTSC M	NTSC M	4
ECUADOR	NTSC M	NTSC M	4
EGYPT	SECAM B/PAL B	SECAM G/PAL G	2
EL SALVADOR	NTSC M	NTSC M	4
EQUAT. GUINEA	PAL B		5
ESTONIA	PAL B (was SECAM)	PAL D	5
ETHIOPIA	PAL B	PAL G	5
FIJI	PAL B		
FINLAND	PAL B	PAL G	2
FRANCE	SECAM L	SECAM L	2
FRENCH POLYNESIA	SECAM K1		
GABON	SECAM K1		5
GAMBIA	PAL I		5
GERMANY	PAL B	PAL G	2
GHANA	PAL B	PAL G	5
GIBRALTAR	PAL B	PAL H	2
GREECE	PAL B (was SECAM)	PAL G	2
GREENLAND	NTSC/PAL B		2
GUADELOUPE	SECAM K1		
GUAM	NTSC M		1
GUATEMALA	NTSC M	NTSC M	4
GUINEA	PAL K		5
GUYANA (FRENCH)	SECAM K1		4
HONDURAS	NTSC M	NTSC M	4

TV System Guide (continued)

COUNTRY	VHF	UHF	DVD REGIONS
LIBYA	SECAM B	SECAM G	5
LITHUANIA	PAL D (was SECAM)	PAL K	5
LUXEMBOURG	PAL B/SECAM L	PAL G/SEC L	2
MADAGASCAR	SECAM K1		5
MADEIRA	PAL B		
MALAGASY	SECAM K1		
MALAWI	PAL B	PAL G	5
MALAYSIA	PAL B		3
MALI	SECAM K1		5
MALTA	PAL B	PAL H	2
MARTINIQUE	SECAM K1		
MAURITANIA	SECAM B		5
MAURITIUS	SECAM B		5
MEXICO	NTSC M	NTSC M	4
MONACO	SECAM L		2
MONGOLIA	SECAM D		5
MOROCCO	SECAM B		5
MOZAMBIQUE	PAL B		5
NAMIBIA	PAL I		5
NEPAL	PAL B		
NETHERLANDS	PAL B	PAL G	2
NETH. ANTILLES	NTSC M	NTSC M	
NEW CALEDONIA	SECAM K1		
NEW GUINEA	PAL B	PAL G	4
NEW ZEALAND	PAL B	PAL G	4
NICARAGUA	NTSC M	NTSC M	4
NIGER	SECAM K1		5
NIGERIA	PAL B	PAL G	5
NORWAY	PAL B	PAL G	2
OMAN	PAL B	PAL G	2
PAKISTAN	PAL B		5
PANAMA	NTSC M	NTSC M	4
PARAGUAY	PAL N	PAL N	4
PERU	NTSC M	NTSC M	4
PHILIPPINES	NTSC M	NTSC M	3
POLAND	PAL D	PAL K	2
PORTUGAL	PAL B	PAL G	2
PUERTO RICO	NTSC M	NTSC M	1
QATAR	PAL B		2
REUNION	SECAM K1		
RUMANIA	PAL D	PAL K	2
RUSSIA	SECAM D	SECAM K	5
RWANDA	SECAM K1		5
SABAH/SAWARA	PAL B		
ST. KITTS	NTSC M	NTSC M	
SAMOA (US)	NTSC M		1
SAUDI ARABIA	SECAM-B/PAL-B	SECAM G	2
SENEGAL	PAL		5
SEYCHELLES	PAL B	PAL G	5
SIERRA LEONE	PAL B	PAL G	5
SINGAPORE	PAL B	PAL G	
SLOVAK REPUBLIC	PAL	PAL	2
SOMALIA	PAL B	PAL G	5
SOUTH AFRICA	PAL I	PAL I	2
SPAIN	PAL B	PAL G	2
SRI LANKA	PAL B		5
SUDAN	PAL B	PAL G	5
SURINAM	NTSC M	NTSC M	4
SWAZILAND	PAL B	PAL G	
SWEDEN	PAL B	PAL G	2
SWITZERLAND	PAL B	PAL G	2
SYRIA	SECAM B		2

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